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REMOVAL PROGRAM
PRELIMINARY ASSESSMENT/
SITE INVESTIGATION REPORT ADDENDUM
FOR THE
PARK STREET SITE
BENNINGTON, BENNINGTON COUNTY, VERMONT
JULY, AUGUST, AND SEPTEMBER 2012

Prepared For:

U.S. Environmental Protection Agency
Region I
Emergency Planning and Response Branch
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

CONTRACT NO. EP-W-05-042

TDD NO. 01-12-03-0002

TASK NO. 0779

DC NO. R-7369

Submitted By:

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Region I
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March 2013

SDMS DocID

582114

INTRODUCTION

From July through September 2012, U.S. Environmental Protection Agency (EPA) Region I and Weston Solutions, Inc. (Weston), Superfund Technical Assessment and Response Team III (START) mobilized to the Park Street site (the site) located in Bennington, Bennington County, Vermont. During this timeframe, several sampling events were conducted as part of the Removal Program Preliminary Assessment/Site Investigation (PA/SI) to determine if further actions, including removal activities, were warranted at the site. These events included conducting indoor air sampling at a residential property; conducting soil sampling at four residential properties and a wetland area; and installing 12 monitoring wells and conducting groundwater sampling on six properties.

SITE DESCRIPTION

The Park Street site (the site) is located on Park Street and Bowen Road in Bennington, Bennington County, Vermont. Geographic coordinates of the site are 42° 53' 27.9" north latitude and 73° 11' 32.9" west longitude, as measured from the approximate center of the site (see Appendix A, Figure 1) [1]. The site consists of Little League baseball fields, six residential properties, and wetland areas. The site is adjacent to the former Jard Company, Inc. (Jard) site (former Jard site), and is abutted to the west by the Bennington Square Shopping Center, to the north by North Branch Street and industrial properties, to the east by Bowen Road, and to the south by the former Jard site and the Roaring Branch of the Walloomsac River (Roaring Branch) (see Appendix A, Figure 2) [2].

The site may be potentially impacted by contamination from the former Jard site, a former capacitor and transformer manufacturing facility that produced capacitors, non-fluid transformers, and motors used in household appliances. Jard generated wastes associated with its manufacturing processes from 1969 to 1986. These wastes included polychlorinated biphenyls (PCBs); a variety of volatile organic compounds (VOCs), including trichloroethylene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and toluene; semivolatile organic compounds (SVOCs); waste hydraulic and lubricating oils; waste paints and varnishes; waste zinc oxide; waste-contaminated rejected capacitors; spent SpeediDriTM; and PCB- and phthalate-contaminated wastewater. From September 2006 through August 2007, U.S. EPA conducted a Removal Action at the former Jard site, removing PCB-contaminated materials [3].

Subsequent to the EPA Removal Action at the former Jard site, the Vermont Department of Environmental Conservation (VT DEC) expressed concerns regarding surface and subsurface soil and groundwater contamination related to the Park Street site, which is located downgradient of the former Jard site. VT DEC requested EPA's assistance with further investigation activities at the Park Street site.

SITE ACTIVITIES

On 24 and 25 July 2012, OSC Catherine Young and START member John Burton mobilized to the site to conduct indoor air sampling at 403 Park Street as part of the PA/SI extent-of-contamination evaluation...All personnel for this sampling event and for the remaining sampling

activities signed the site-specific health and safety plan (HASP), which was prepared as a separate document entitled, Weston Solutions, Inc. Region I START Site Health and Safety Plan (HASP) for the Park Street Site, Park Street, Bennington, Vermont.

Five sampling stations were set up throughout the 403 Park Street residential property. The air samples were collected over a 24-hour period on polyurethane foam (PUF) plugs in glass cartridges. The samples were analyzed for PCBs at a START-procured Delivery of Analytical Services (DAS) laboratory [4].

Air sampling was conducted at this residential property based on the results from original soil sampling conducted in April 2012 that were documented in a separate document, entitled Removal Program Preliminary Assessment/Site Investigation Report for the Park Street Site, Bennington, Bennington County, Vermont, 2 through 6 April 2012, dated September 2012 [5].

On 6 through 9 August 2012, OSC Eric Vanderboom and START personnel Lauren Long, Stephanie Bitzas, Rob Sharp, and Bill Mahany mobilized to the site to conduct additional sampling to determine the extent of contamination [6, 7]. START collected 53 sediment samples from the wetlands area; 12 soil samples from the residential property at 414 Bowen Road; 15 soil samples from the residential property at 538 Bowen Road; 30 soil samples from the residential property at 594 Bowen Road; and three soil/floor sweep samples from the residential property at 410 Park Street. See Appendix A, Figures 3a through 3e, for soil and sediment sample locations; and Appendix B, Tables 1 and 2, for all soil and sediment descriptions.

START personnel established a support zone and calibrated the air monitoring instrument which was a MultiRae Plus unit [lower explosive limit (LEL), oxygen (O_2), carbon monoxide (CO), hydrogen sulfide (H_2S), and VOC detectors] [8]. Ambient conditions were recorded in the site-specific HASP as follows: LEL = 0%; O_2 = 20.9%; CO = 0 parts per million (ppm); H_2S = 0 ppm; VOC = 0 ppm. Air monitoring was conducted for the duration of the extent-of-contamination sampling. Any levels above background were documented in the site-specific HASP. START sampling activities were performed in accordance with the site sampling and analysis plan (SAP), which was prepared as a separate document, entitled Sampling and Analysis Plan for the Park Street Site, Bennington, Bennington County, Vermont. START personnel conducted soil sampling activities in Level D or Modified Level D personal protective equipment (PPE), as per the site-specific HASP.

All samples were screened on site for PCBs by the EPA Office of Environmental Measurement and Evaluation (OEME) mobile laboratory. In addition, approximately 10% of the samples were selected for confirmation PCB analysis at the OEME laboratory located in North Chelmsford, Massachusetts.

On 13 August 2012, boring advancement and monitoring well installation activities began at the site [9]. These activities were conducted in accordance with the document entitled, Request for Proposal for Soil Borings and Monitoring Well Installation at the Park Street Site, Bennington, Vermont, 20 July 2012. The objective for installing the monitoring wells was to assist VT DEC with determining the downgradient extent of a PCB plume identified during recent investigations at the site.

START members George Mavris and Andrew Danikas, and OSC Eric Vanderboom met at the Bennington Square Shopping Center located on Kocher Drive. New Hampshire Boring, Inc. (NHB) personnel Manlea Thompson (driller) and Matt Soucy (driller's assistant) arrived on site. The drill rig had broken down en route and would not be on site until the following day. A tailgate safety meeting was held, and site history; chemical, physical, and biological hazards; and proposed scope of work details were discussed. All personnel reviewed and signed the site HASP. Tailgate safety meetings were conducted every morning prior to commencing drilling activities.

A site walk was conducted to inspect the locations in the wetland area where monitoring wells would be installed. The area was heavily overgrown and contained wetlands in some areas. Three proposed well locations (EPA-102, EPA-103, and EPA-105) were observed in the wetland area, and two were observed on residential properties (EPA-104S/EPA-104D at 403 Park Street and EPA-100 at 1086 Branch Street) (see Figure 4, Monitoring Well Location Map).

NHB mechanics were en route to repair the disabled drill rig to have it ready for initiation of drilling activities the following morning. Site activities were completed for the day, and all personnel departed the site.

On 14 August 2012, START personnel Mavris and Danikas and OSC Vanderboom arrived on site behind the Bennington Square Shopping Center. NHB personnel were already on site and had conducted an inspection of the drill rig and equipment prior to moving to the first location (EPA-105). A drill rig and equipment inspection was conducted by NHB personnel every morning prior to commencing drilling activities.

NHB vehicles on site included a flatbed truck, drill rig (CME-550X), box truck, and air compressor. NHB personnel cleared brush and trees prior to moving the drilling equipment to the first well location. This well served as a test boring and would be drilled deeper than the other wells to determine characteristics of subsurface geology downgradient of the Jard property.

NHB began drilling using the ODEX drilling method. The ODEX drilling method operates with the use of a pilot bit with an eccentric reamer bit, a down-the-hole-hammer, a specialized drive shoe and steel casing. Using this method allows for the hammer to pulverize the material below the casing and then blows it back through the casing to the top of the hole. As the hammer drives through the material, it also reacts against an interior shoulder beveled inside the steel casing, which pulls the casing down the hole as the hammer drill is advanced. This method is well suited for drilling through difficult formations such as cobbles and boulders, but does not allow for an adequate description of the surficial materials and suitable sample collection. This method of drilling was used to get through the zone of cobbles and boulders which comprised the shallow overburden at the site.

The boring at location EPA-105 broke through the cobble/boulder layer at approximately 19 feet below ground surface (bgs). Material blowing up to the surface via compressed air was examined and found to consist of gravel, cobbles, and boulders (white, pink, red, tan, brown, and black quartzite and metamorphic rock fragments), and fine-to-coarse sand, and silt. This general description of the cobble/boulder layer (shallow overburden) can be applied to all of the borings advanced during this project. Once the shallow cobble/boulder layer was penetrated, the ODEX

system casing was retracted, and the drive and wash drilling method was used to complete the boring. This procedure was also repeated for the remaining borings.

Mark White, Town of Bennington Water Department, arrived on site and discussed the proposed monitoring well locations. START provided him with a map showing the proposed well locations, and he stated that he would mark the locations where any water lines were present at 403 Park Street. All other locations were cleared for water and sewer lines.

Site activities were completed for the day. NHB personnel secured vehicles and equipment, and all personnel departed the site for the day.

On 15 August 2012, drilling activities continued, and NHB resumed advancing boring EPA-105 using the drive and wash drilling method. The boring was advanced to 42 feet bgs, six split spoon samples were collected, and a monitoring well was installed in the boring (see Appendix F, Boring Logs). Soil cuttings and water generated during drilling activities were containerized and secured in 55-gallon drums. The drums were subsequently moved to a drum staging area located in the open field east of the Bennington Square Shopping Center. Site activities were completed for the day. NHB personnel secured vehicles and equipment, and all personnel departed the site.

On 16 August 2012, START and NHB completed installing the monitoring well at EPA-105, and constructed a decontamination pad and drum storage area east of the Bennington Square Shopping Center. NHB personnel decontaminated drilling equipment after completing EPA-105. Drilling equipment was decontaminated after completing each boring and prior to moving to the next drilling location for the duration of the project. Drums containing soil cuttings and water were stored on wooden pallets in the drum staging area. START placed appropriate labels characterizing the waste stored in the drums as the drums were filled.

The NHB crew refilled their water tanks prior to setting up at the second location, EPA-103. The dirt road leading to the location of EPA-103 was modified (a low spot was filled with boulders and covered with terra mats), and some brush clearing took place.

Site activities were completed for the day. NHB personnel secured vehicles and equipment, and all personnel departed the site for the day.

On 17 August 2012, NHB completed drilling at EPA-103. EPA-103 was drilled approximately 14.5 feet bgs before breaking through the cobble/boulder layer. Two split spoons were advanced through the ODEX casing. When the NHB crew pulled out the ODEX casing, the bottom piece of the casing with the pilot bit was lost in the borehole. As a result, the boring could not be advanced any deeper and would have to be re-drilled.

The drill rig was moved a few feet away, and NHB began advancing the second boring at EPA-103. While driving the ODEX casing, a large boulder was encountered that caused the casing to enter at an angle. The casing was retracted, and a third boring was begun. The boring was advanced to 17 feet bgs. Work for the day stopped at this point, and the NHB crew secured their vehicles and equipment. START secured and labeled all of the drums containing investigation-derived waste. (IDW) and notified the Bennington Police Department that 55-gallon drums

containing soil cuttings and water would be left in the field area east of the shopping plaza over the weekend. All personnel departed the site for the weekend.

On 20 August 2012, START member Mavris, OSC Eric Vanderboom, and NHB personnel (including Manlea Thompson and Matt Soucy) arrived on site to resume drilling activities. NHB had mobilized an additional person and a larger air compressor unit. NHB resumed drilling activities at EPA-103. NHB set up the drive and wash drilling method and advanced the boring to 37 feet bgs. Six split spoon samples were collected, and a monitoring well was installed in the boring. Soil cuttings and water generated during drilling activities were containerized and secured in 55-gallon drums.

NHB cleared a path and moved the drill rig and equipment over to the EPA-102 location. Drilling began using the ODEX drilling method and continued to a depth of 18 feet bgs, before drilling activities stopped for the day. Site activities were completed, NHB personnel secured vehicles and equipment, and all personnel departed the site for the day.

On 21 August 2012, drilling activities resumed. NHB personnel resumed drilling at EPA-102 using the ODEX method, and broke through the cobbles/boulder layer at 21 feet. NHB advanced the boring to 37 feet bgs, collected six split spoon samples, and installed a monitoring well in the boring. Soil cuttings and water were containerized and secured in 55-gallon drums.

NHB cleared a path through the wetlands/wooded area and moved the drill rig and equipment to location EPA-104, where a monitoring well couplet was installed. This location was moved from a residential property to the open field west of the property. NHB began drilling EPA-104D using the ODEX drilling method, and broke through the cobbles/boulder layer at 18 feet and collected two split spoon samples. A clay layer was encountered at approximately 19 feet; therefore, drilling was stopped, and a monitoring well was installed in the boring. Drilling activities cease for the day, the NHB crew secured the rig and equipment, and all personnel departed site.

On 21 August 2012, START and NHB refilled their water tanks and began drilling at EPA-102S using the ODEX method. EPA-104S was advanced to 11.5 feet bgs, and a monitoring well was installed in the boring.

NHB set up to drill EPA-101 on Park Street adjacent to the Walloomsac River. The boring was advanced using the ODEX drilling method and broke through the cobble/boulder layer at 20 feet bgs. When NHB pulled out the ODEX casing, the bottom piece of the casing with the pilot bit with the carbide teeth was lost in the borehole and the borehole collapsed. As a result, the boring could not be advanced any deeper in that location, and a co-located boring was advanced through the cobble/boulder zone using the ODEX drilling method. The drive and wash drilling method was then used to advance the boring to 35 feet bgs, and five split spoon samples were collected and characterized. Drilling activities were completed for the day, NHB secured the rig and equipment, and all personnel departed the site.

On 22 August 2012, NHB refilled their water tanks and set up the drill rig and equipment at EPA-106, where a monitoring well couplet was installed. NHB began drilling EPA-106D using the ODEX drilling method, and broke through the cobble/boulder layer at 23 feet. NHB changed

over to the drive and wash drilling method and advanced the boring to 30 feet bgs. Four split spoon samples were collected and characterized, and a monitoring well was installed in the boring. A clay layer was encountered at approximately 28 feet; therefore, drilling was stopped, and a monitoring well was installed in the boring.

NHB personnel advanced the boring at EPA-106S down to approximately 12 feet using the ODEX drilling method and installed a monitoring well in the boring. Drilling activities were completed for the day, NHB secured the rig and equipment, and all personnel departed the site.

On 23 August 2012, drilling activities resumed. NHB refilled their water tanks and set up the drill rig and equipment at EPA-108, where another monitoring well couplet was installed. The NHB crew began drilling EPA-108D using the ODEX drilling method, and broke through the cobble/boulder layer at 30 feet. When the NHB crew pulled out the ODEX casing, the bottom piece of the casing with the pilot bit with the carbide teeth was lost in the borehole, and the borehole collapsed. Drilling activities were completed for the week, NHB secured the rig and equipment, and all personnel departed the site for the weekend. START notified the Bennington police Department that four drums of IDW remained on site.

On 27 August 2012, drilling activities resumed. NHB personnel set up at EPA-108D and began re-drilling using the ODEX drilling method, and broke through the cobble/boulder layer at 30 feet. NHB changed over to the drive and wash drilling method; advanced the boring to 34 feet bgs; and collected and characterized two split spoon samples. A clay layer was encountered at approximately 32 feet; therefore, drilling was stopped, and a monitoring well was installed in the boring. NHB personnel advanced the boring at EPA-108S down to approximately 13 feet using the ODEX drilling method and installed a monitoring well in the boring. Drilling activities were completed for the day, NHB secured the rig and equipment, and all personnel departed the site.

On 28 August 2012, monitoring well EPA-107 was to be drilled; however, due to heavy rainfall, EPA decided to postpone drilling EPA-107 until the following day to avoid damage to the lawn at this residential property. NHB set up drilling operations at EPA-100 instead. NHB personnel set up a drill at EPA-100 and began drilling using the ODEX drilling method, and broke through the cobble/boulder layer at 33 feet. As the ODEX casing was pulled out of the boring, another bottom piece of the casing with the pilot bit was lost. However, the borehole did not collapse. NHB switched over to the drive and wash drilling method, and collected and characterized two split spoon samples. A clay layer was encountered at approximately 33 feet; therefore, drilling was stopped, and a monitoring well was installed in the boring.

NHB personnel also began developing the monitoring wells that were already installed and collected approximately 3 to 4 gallons of purge water from each well so that a sample could be collected for IDW (aqueous) analysis.

OSC Vanderboom, START member Mavris, and NHB crew met at the North Branch Street residential property to assess the moving and staging of vehicles on the property.

Drilling activities were completed for the day, NHB secured the rig and equipment, and all personnel departed the site.

On 29 August 2012, drilling activities commenced at the residential property on North Branch Street (1086) (Hunt Residence). NHB laid down terra-mats to prevent lawn damage, and used plastic sheeting to cover the drill area and minimize water splashing.

NHB personnel set up at EPA-107 and began drilling using the ODEX drilling method, and broke through the cobble/boulder layer at 20 feet. NHB switched over to the drive and wash drilling method, and collected and characterized four split spoon samples. Bedrock was encountered at approximately 28.5 feet; therefore, drilling was stopped, and a monitoring well was installed in the boring. A monitoring well couplet was to be installed in this location; however, since bedrock was encountered at a shallow depth, the OSC determined that a single well with a 10-foot long screen, rather than a 5-foot screen, would be installed at this location.

OSC Dan Burgo arrived on site to assume OSC responsibilities.

Drilling activities were completed, and a total of 12 monitoring wells were installed. NHB secured the rig and equipment, and all personnel departed the site.

On 30 August 2012, NHB finished developing the remaining monitoring wells. All of the drums containing IDW were moved and staged in the designated area east of the Bennington Square Shopping Center.

START member Mavris collected one representative soil and one representative water sample from the IDW drums for disposal analyses [VOCs, SVOCs, pesticides, PCBs, Resource Conservation and Recovery Act (RCRA)-8 metals, flashpoint, and pH]. Chain-of-custody documentation was completed, and samples were prepared for delivery to the U.S. EPA Office of Environmental Measurement and Evaluation (OEME). START member Mavris relinquished custody of the samples to OSC Vanderboom, who delivered the samples to OEME.

NHB completed decontaminating their equipment and demobilized from the site. One vehicle was left behind (compressor) until the next (Friday) morning.

START member Mavris gauged all monitoring wells, used a global positioning system (GPS) instrument to locate the 12 monitoring wells, labeled the 12 IDW drums, and photodocumented the staging area and drums. The Bennington Police Department was notified that the 12 55-gallon drums would be staged east of Bennington Square Shopping Center until off-site disposal arrangement could be made.

Site activities were completed, and START member Mavris departed the site.

On 26 and 27 September 2012, EPA OSC Burgo and START personnel Eric Ackerman, Colin Cardin, Stephanie Bitzas, Andrew Danikas, and Rob Sharp mobilized to site and collected a total of 17 groundwater samples from the 12 recently installed monitoring wells (EPA-100, EPA-101, EPA-102, EPA-103, EPA-104S, EPA-104D, EPA-105, EPA-106S, EPA-106D, EPA-107, EPA 108S, and EPA-108D). One of the 17 groundwater samples collected was a duplicate (GW-109), and four of the samples (GW-101-F, GW-102-F, GW-106D-F, and GW-108D-F) were filtered in the field due to high turbidity. Groundwater samples were collected using the low-flow groundwater sampling method [10].

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Sample locations were photodocumented and recorded using the TrimbleTM Pathfinder Pro XRS Global Positioning System (GPS) unit (see Appendix C, Photodocumentation Log) [11]. EPA chain-of-custody procedures were utilized for all sampling activities and were completed by START (see Appendix D, Chain-of-Custody Record).

Two additional 55-gallon drums of purge/decontamination water were generated during groundwater sampling activities. These drums were labeled and staged with the 12 drums generated during drilling activities.

ANALYTICAL DATA SUMMARIES

Air Sampling

The results from the July 2012 air sampling conducted at 403 Park Street indicated levels of total PCBs ranging from 34,800 picograms per cubic meter (pg/m³) in the dining room to 246,000 pg/m³ in the basement (see Appendix B, Table 3) [12].

Soil/Sediment Sampling

During the August 2012 sediment sampling of the wetland area, field screening results showed detections of Aroclor-1242 in four sediment samples, with a maximum concentration of 1.0 milligrams per Kilogram (mg/Kg) at sample location SD-523 (see Appendix B, Table 4). Approximately 10% of the field-screened samples were submitted for confirmation analysis. Aroclor-1242 was detected in three wetland samples during confirmation analysis, with a maximum concentration of 3.2 mg/Kg at the same location, SD-523 (see Appendix B, Table 5) [13-16].

A total of five sample locations, three of which were in the crawl space, at 410 Park Street were field-screened for PCBs by EPA chemist Scott Clifford. All of these samples were non-detect (ND) for Aroclor-1242 during field screening. During confirmation analysis, one sample, P-410-SS-02 (collected in the crawl space under the house), revealed the presence of Aroclor-1242 at a concentration of 0.39 mg/Kg and Aroclor-1260 at a concentration of 0.22 mg/Kg [13-16].

A total of 12 samples (plus one laboratory duplicate) from 414 Bowen Road were field-screened for PCBs. All of these samples were ND for Aroclor-1242 during field screening. The four samples submitted for confirmation analyses were also ND for PCBs [13-16].

A total of 15 sample locations at 538 Bowen Road were field screened for PCBs. All of these samples were ND for Aroclor-1242 during field screening. The two samples submitted for confirmation analyses were also ND for PCBs [13-16].

A total of 30 samples (plus one laboratory duplicate) from 594 Bowen Road were field screened for PCBs. All of these samples were ND for Aroclor-1242 during field screening. The three samples submitted for confirmation analyses were also ND for PCBs [13-16].

1

Groundwater Sampling

In September 2012, samples were collected from all groundwater monitoring wells recently installed on site. Based on the analytical results received from OEME, no PCB Aroclors were detected above their reporting limits in any of the samples [17].

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Appendices

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Appendix A

Figures

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3a	Sediment Sample Location Map
Figure 3b	Sample Location Map, 410 Park Street
Figure 3c	Sample Location Map, 414 Bowen Road
Figure 3d	Sample Location Map, 538 Bowen Road
Figure 3e	Sample Location Map, 594 Bowen Road
Figure 4	Monitoring Well Location Map

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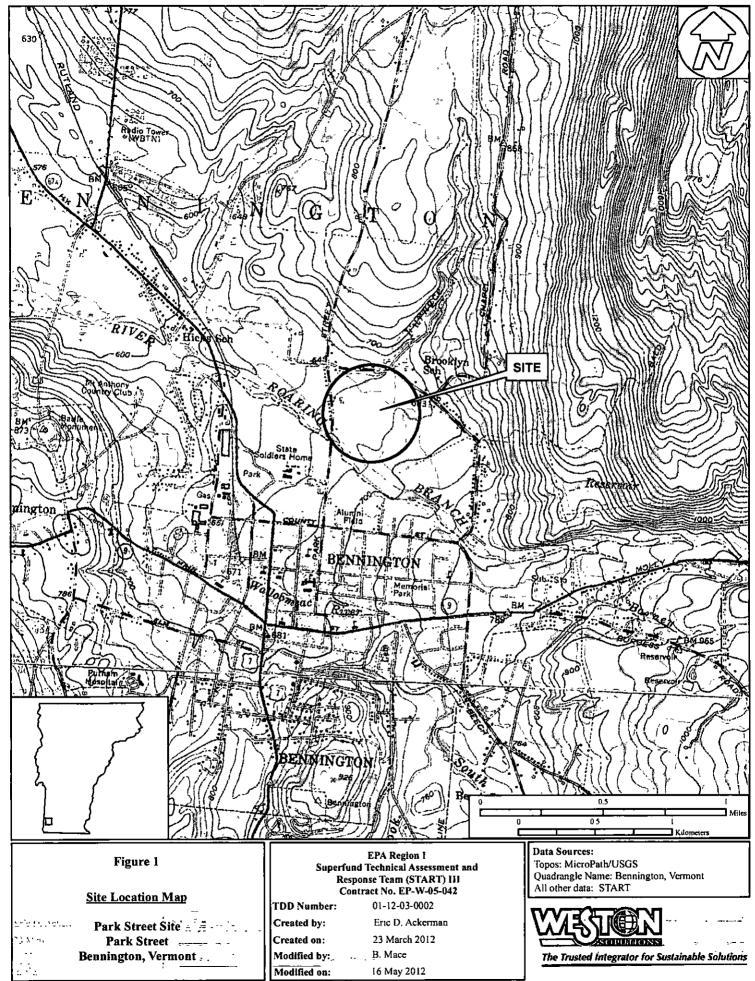




Figure 2

Site Map

Park Street Site Park Street Bennington, Vermont

EPA Region I Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

TDD Number: 12-03-0002
Created by: Eric D. Ackerman
Created on: 23 March 2012
Modified by: B Mace
Modified on: 29 May 2012

Legend



Feet 0 150 300

Data Sources:

Imagery Bing Maps Aerial (Microsoft Corp)
All other data: START





Figure 3a

Sediment Sample Location Map

Park Street Site Bennington, Vermont

EPA Region I Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

TDD Number: 12-03-0002

Created by: L Long

25 September 2012 Created on: Modified by: C. Dupree

22 October 2012 Modified on:

Legend

Sediment Sample Location



300 0 50 100



Feet

Data Sources:

Imagery. Bing Maps MicroPath All other data: START





Figure 3b

Sample Location Map 410 Park Street

Park Street Site Bennington, Vermont

EPA Region I Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

Legend

- ☐ Sediment Sample Location
- O Soil Sample Location



0 25 50

Data Sources:

Imagery: Bing Maps
Topos MicroPath
All other data: START



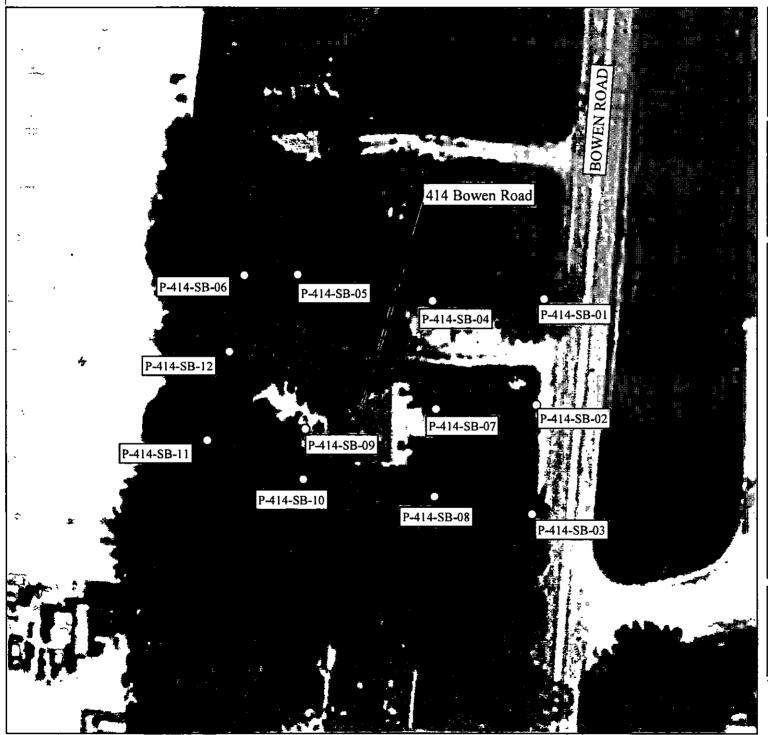


Figure 3c

Sample Location Map 414 Bowen Road

Park Street Site Bennington, Vermont

EPA Region I Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

TDD Number: 12-03-0002

Created by: L. Long

Created on: 25 September 2012 Modified by: C. Dupree

Modified on: 22 October 2012

Legend

Soil Sample Location



0 25 50 Feet

Data Sources:

Imagery: Bing Maps Topos MicroPath All other data START



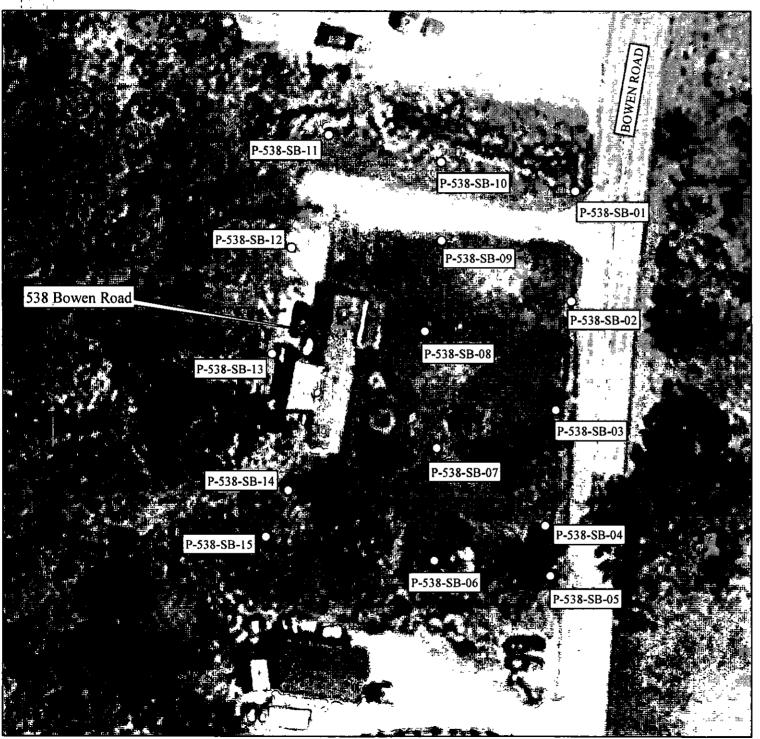


Figure 3d

<u>Sample Location Map</u>

538 Bowen Road

Park Street Site Bennington, Vermont

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042

TDD Number: 12-03-0002 Created by: L. Long

Created on: 25 September 2012

Modified by: C, Dupree
Modified on: 22 October 2012

Legend

O Soil Sample Location



25 50 Feet

Data Sources:

Imagery Bing Maps
Topos: MicroPath
All other data START



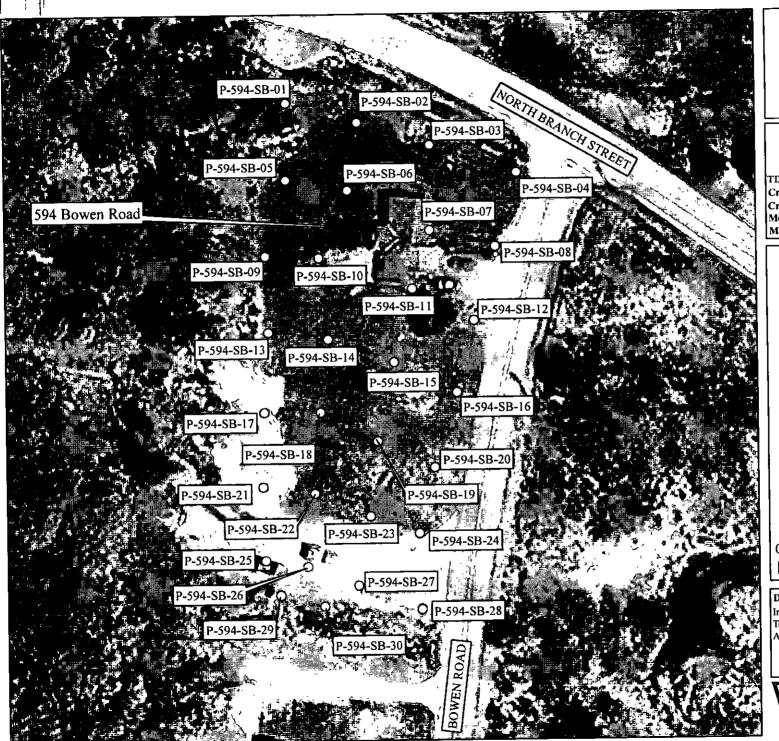


Figure 3e

Sample Location Map 594 Bowen Road

Park Street Site Bennington, Vermont

EPA Region I Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

TDD Number: 12-03-0002

Created by: L Long

Created on: 25 September 2012

Modified by: C, Dupree

Modified on: 22 October 2012

Legend

O Soil Sample Location



25 50

100 Feet

Data Sources:

Imagery: Bing Maps
Topos: MicroPath
All other data: START



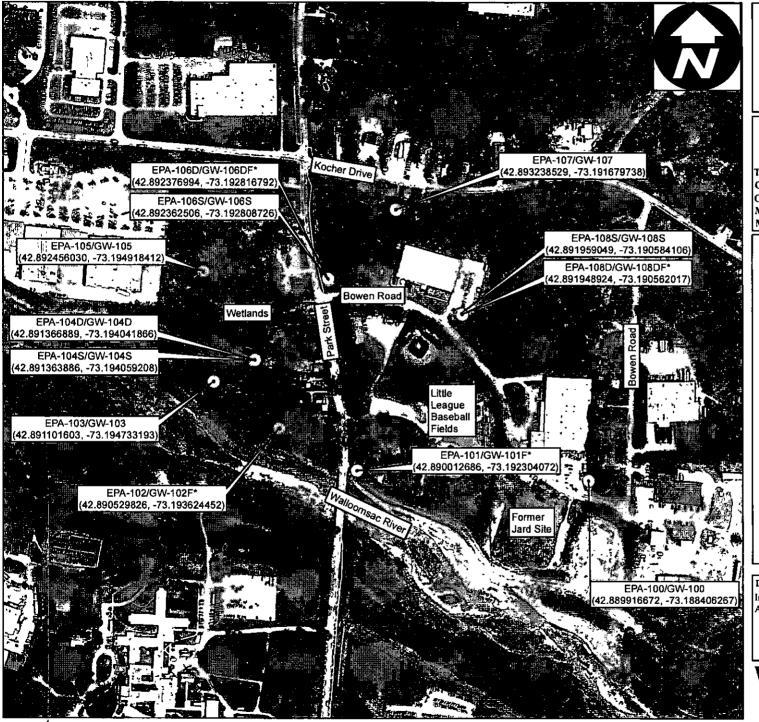


Figure 4

Monitoring Well Location Map

Park Street Site Park Street Bennington, Vermont

EPA Region I

Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

TDD Number: 12-03-0002

Created by: Enc D. Ackerman
Created on: 23 March 2012

Created on: 23 March 26
Modified by: B. Mahany

Modified on: 6 September 2012

Legend

Well Location

Monitoring Well Nümber/ Sample Location Number

*Samples collected from these wells were filtered in the field.

Feet 0 250 500

Data Sources:

Imagery: Bing Maps Aerial (Microsoft Corp)
All other data: START



Appendix B

Tables

Table 1	Soil Sample Descriptions
Table 2	Sediment Sample Descriptions
Table 3	Summary of Air Sample Results
Table 4	PCB Field Screening Results
Table 5	Summary of Polychlorinated Biphenyl Results

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SOIL SAMPLE DESCRIPTIONS PARK STREET BENNINGTON, VERMONT

Sample	Sample	Sample	Coffection	Sample	KARE III. CONTRACTOR OF THE STATE OF THE STA	WARE CO. COMMUNICATION OF THE
Location	Number	Depth	Date	Туре	Sample Description	Comments
R01-120403CY-0147	P-410-SS-01	0-3 in.	8/8/12	Composite	Brown, fine to coarse SAND, some coarse gravel.	Collected from the basement near oil tank, wet. Collected on the side of the wall
R01-120403CY-0148	P-410-\$S-02	0-3 in.	8/8/12	Composite	Brown, fine to coarse SAND, some coarse gravel.	by the tank, wet.
R01-120403CY-0149	P-410-SS-03	0-3 in.	8/8/12	Composite	Brown, fine to coarse SAND, some coarse gravel.	Collected on the side of the wall by the well, moist.
R01-120403CY-0150	P-414-SB-01	0-12 in.	8/8/12	Grab	Medium to dark brown, fine to coarse SAND, little fine to coarse gravel and silt, trace organics.	
R01-120403C1-0130	F-414-00-01	Q-12 III.	0/0/12	Giab	Dark brown, coarse SAND, some coarse gravel, trace	
R01-120403CY-0151	P-414-SB-02	0-12 in.	8/8/12	Grab	organics. Dark brown, fine SAND, little coarse gravel, trace	.
R01-120403CY-0152	P-414-SB-03	0-12 in.	8/8/12	Grab	organics. Medium brown to gray, fine to coarse SAND, some fine	
R01-120403CY-0153	P-414-SB-04	0-12 in.	8/8/12	Grab	to coarse gravel, little silt, trace organics.	
R01-120403CY-0154	P-414-SB-05	0-12 in.	8/8/12	Grab	Light to dark brown, fine SAND, trace coarse gravel, trace organics.	
R01-120403CY-0155	P-414-SB-06	0-12 in.	8/8/12	Grab	Medium brown, fine SAND and SILT, trace fine gravel, trace organics.	•
R01-120403C1-0100	F-414-30-00	0-12 III.	0/0/12	Giab	Black, fine to coarse SAND, little fine to coarse gravel	
R01-120403CY-0156	P-414-SB-07	0-12 in.	8/8/12	Grab ·	and slit, trace organics	
R01-120403CY-0157	P-414-SB-08	0-12 in.	8/8/12	Grab	Light brown, fine SAND, little coarse gravel, trace organics.	
R01-120403CY-0158	P-414-SB-09	0-12 ln.	8/8/12	Grab	Medium to dark brown, fine to coarse SAND, little slit, trace fine to coarse gravel, trace organics.	
,	, 417, 65 65		0,0,12		Dark brown to black, coarse SAND, trace coarse gravel,	
R01-120403CY-0159	P-414-SB-10	0-12 in.	8/8/12	Grab	trace organics. Dark brown, fine SAND, trace coarse gravel, trace	
R01-120403CY-0160	P-414-SB-11	0-12 ln.	8/8/12	Grab	organics.	
R01-120403CY-0161	P-414-SB-12	0-12 ın.	8/8/12	Grab	Light brown, fine SAND, little silt, trace fine gravel and organics.	
R01-120403CY-0162	P-538-SB-01	0-12 in.	8/8/12	Grab	Dark to light brown, fine SAND, little coarse gravel, trace organics.	A100.
R01-120403CY-0163	P-538-SB-02	0-12 in.	8/8/12	Grab	Reddish brown to brown, coarse SAND, some coarse gravet, trace organics.	B100.
R01-120403CY-0164		0-12 in.	8/8/12	Grab	Dark brown to gray, fine SAND, trace coarse gravel, trace organics.	C100.
R01-120403C1-0104	F-030-0D-03	Q-12 III.	0/0/12	9120	Light brown, line to coarse SAND, little fine to coarse	
R01-120403CY-0165	P-538-SB-04	0-12 in.	8/8/12	Grab	gravel and silt, trace organics. Medium brown, fine SAND and SILT, trace fine to coarse	D100.
R01-120403CY-0166	P-538-SB-05	0-12 in.	8/8/12	Grab	gravel, trace organics.	E100.
R01-120403CY-0167	P-538-SB-06	0-12 in.	8/8/12	Grab	Light brown to gray, SILT and fine SAND, little clay, trace fine gravel, trace organics.	E050.
R01-120403CY-0168	P-539-SR-07	0-12 in.	8/8/12	Grab	Light to medium brown, fine to coarse SAND, little fine to coarse gravel, trace silt, trace organics.	D050.
					Dark brown, fine SAND, little coarse gravel, trace	
R01-120403CY-0169	P-538-SB-08	0-12 in.	8/8/12	Grab	organics. Light to dark brown, fine SAND, little coarse gravel, trace	
R01-120403CY-0170	P-538-SB-09	0-12 in.	8/8/12	Grab	organics.	B050.
R01-120403CY-0171	P-538-SB-10	0-12 in.	8/8/12	Grab	Dark brown, coarse SAND, some coarse gravel.	A050.
R01-120403CY-0172	P-538-SB-11	0-12 in.	8/8/12	Grab	Dark brown, coarse SAND, some coarse gravel, trace organics.	A000.
R01-120403CY-0173	P-538-SB-12	0-12 in.	8/8/12	Grab	Gray, SILT and fine SAND, trace fine to coarse gravel, trace organics.	B000.
R01-120403CY-0174	P-538-SB-13	0-12 in.	8/8/12	Grab	Medium brown, fine SAND and SILT, trace fine to coarse gravel, trace organics.	C000.
		0-12 in.	8/8/12	Grab	Gray, fine SAND and SILT, trace organics.	D000.
R01-120403CY-0175					Dark gray, SILT and CLAY, little fine sand, trace	E000.
R01-120403CY-0176		0-12 in.	8/8/12	Grab	organics. 0-8 in.= Sod, fill-like material. 8-12 in.= Gray, fine to	
R01-120403CY-0177	P-594-SB-01	0-12 in.	8/8/12	Grab	coarse SAND and GRAVEL. Brown, fine to coarse SAND and SILT, some clay, trace	A000.
R01-120403CY-0178	P-594-SB-02	0-12 in.	8/8/12	Grab	organics (roots). Dark brown, fine SAND and SiLT, trace roots, trace	A050, moist.
R01-120403CY-0179	P-594-SB-03	0-12 in.	8/8/12	Grab	coarse gravel	A100.

SOIL SAMPLE DESCRIPTIONS PARK STREET BENNINGTON, VERMONT

Sample	Sample	Sample	Collection	Sample	:	· · · · · · · · · · · · · · · · · · ·
Location	Number	Depth	Date	Туре	Sample Description	Comments
			i i		Orange and dark brown, fine to coarse SAND and SILT,	
R01-120403CY-0180	P-594-SB-04	0-12 in.	8/8/12	Grab	little fine to coarse gravel, trace organics (roots).	A150.
504 400 400 00 0404	D 504 0D 05	0.40:-	0/0/40	0	Light brown to brown, fine to coarse SAND and SILT,	B000.
R01-120403CY-0181	P-594-SB-05	0-12 in.	8/8/12	Grab	trace organics, trace coarse gravel. Light brown, fine to coarse SAND and SILT, trace clay,	18000.
R01-120403CY-0182	P-594-SB-06	0-12 in.	8/8/12	Grab	trace organics, trace fine gravel.	B050.
101-12040001-0102	F-394-3D-00	0-12 11.	0/0/12	Giau	Orange and brown, fine SAND and SILT, little fine to	
R01-120403CY-0183	P-594-SB-07	0-12 in.	8/8/12	Grab	coarse gravel.	B100.
					Brown, fine to coarse GRAVEL and SILT, some fine to	
R01-120403CY-0184	P-594-SB-08	0-12 in.	8/8/12	Grab	coarse sand, trace organics (roots).	B150.
					Light brown, fine SAND, little silt, trace fine gravel and	
R01-120403CY-0187	P-594-SB-09	0-12 in.	8/9/12	Grab	organics.	C000.
504 400 400 60	D F04 OD 40	0.401-	0040	0	Medium brown, SILT, some fine to coarse sand, trace	C050.
R01-120403CY-0188	P-594-SB-10	0-12 in.	8/9/12	Grab	fine to coarse gravel and organics. Medium to light brown, SILT, some fine to coarse sand,	C030.
R01-120403CY-0189	P-594-SB-11	0-12 in.	8/9/12	Grab	trace fine to coarse gravel and organics.	C100.
NO 1-120403C 1-0 105	F-384-30-11	0-12 111.	0/3/12	Giau	Medium to light brown, fine to coarse SAND and SILT,	-
R01-120403CY-0190	P-594-SB-12	0-12 in.	8/9/12	Grab	some fine to coarse gravel, trace organics.	C150.
	, , , , , , , , , , , , , , , , , , , ,				Light brown, fine SAND, little coarse gravel, trace	·
R01-120403CY-0191	P-594-SB-13	0-12 in.	8/9/12	Grab	organics.	D000.
			,		Light brown to orange, fine SAND, little coarse gravel,	
R01-120403CY-0192	P-594-SB-14	0-12 in.	8/9/12	Grab	trace organics.	D050.
					Dark brown, fine SAND, trace coarse gravel, trace	
R01-120403CY-0193	P-594-SB-15	0-12 in.	8/9/12	Grab	organics.	D100.
D04 4004030V 0404	0.504.00.46	0.40:-	8/9/12	Grab	Dark gray to dark brown, fine SAND, trace gravel, trace organics.	D150.
R01-120403CY-0194	P-594-SB-16	0-12 in.	0/9/12	Grab	lorganics.	D150.
R01-120403CY-0195	P-594-SB-17	0-12 in.	8/9/12	Grab	Gray, fine SAND and SILT, trace organics.	E000.
101-120-0001-0130	1-004-00-17	0-12-111.	G/6/ (2	0,45	Light brown, fine to coarse SAND, some fine to coarse	
R01-120403CY-0196	P-594-SB-18	0-12 in.	8/9/12	Grab	gravel, little silt, trace organics.	E050.
					Medium to light brown, fine to coarse SAND, some fine	
R01-120403CY-0197	P-594-SB-19	0-12 in.	8/9/12	Grab	to coarse gravel, little silt, trace organics.	E100.
					Gray, fine to coarse SAND, some fine to coarse gravel,	
R01-120403CY-0198	P-594-SB-20	0-12 in.	8/9/12	Grab	little silt, trace organics.	E150.
R01-120403CY-0199	P-594-SB-21	0-12 in.	8/9/12	Grab	Light brown, coarse SAND, little coarse gravel.	F000.
R01-120403CY-0200	P-594-SB-22	0-12 ln.	8/9/12	Grab	Light to reddish brown, coarse SAND, some coarse gravel, trace organics.	F050.
R01-120403C1-0200	F-084-3D-22	V-12 III.	0/3/12	Grab	Dark brown, coarse SAND, little coarse gravel, trace	1 030.
R01-120403CY-0201	P-594-SB-23	0-12 in.	8/9/12	Grab	organics.	F100.
R01-120403CY-0202	P-594-SB-24	0-12 in.	8/9/12	Grab	Light brown, coarse SAND, some coarse gravel.	F150.
					Dark brown, SILT and fine to coarse SAND, little fine to	
R01-120403CY-0203	P-594-SB-25	0-12 in.	8/9/12	Grab	coarse gravel, trace organics.	G000.
					Light brown, fine to coarse SAND, little fine to coarse	
R01-120403CY-0204	P-594-SB-26	0-12 in.	8/9/12	Grab	gravel, trace silt and organics.	G050
]		Light to medium brown, fine to coarse SAND, little fine to	
R01-120403CY-0205	P-594-SB-27	0-12 in.	8/9/12	Grab	coarse gravel, trace silt.	G100.
}					Light brown, fine to coarse SAND, little fine to coarse	l
R01-120403CY-0206	P-594-SB-28	0-12 in.	8/9/12	Grab	gravel, trace silt and organics.	G150.
					0.44.7	luono
R01-120403CY-0207	P-594-SB-29	0-12 in.	8/9/12	Grab	Medium brown, coarse SAND, little coarse gravel. Reddish brown to gray, coarse SAND, little coarse	H000.
R01-120403CY-0208	P-594-SB-30	0-12 in.	8/9/12	Grab	gravel, trace organics.	H050.
NO 1-120403C 1-0208	F-084-0D-30	U-12 III.	O/S/12	GIAD	Igraver, nace organics.	11000.

NOTES:

ın. = inches

F-4...

g= 1.1

SEDIMENT SAMPLE DESCRIPTIONS PARK STREET BENNINGTON, VERMONT

Campula	Sample	Sample	Collection	Cample		я
Sample Number		Depth (In.)		Type	Sample Description	Comments
i i i i i i i i i i i i i i i i i i i	1000000			1777		
R01-120403CY-0094	SD-501	0-12	8/7/2012	Grab	Dark brown, CLAY and SILT, trace organics (roots).	Moist, A000.
R01-120403CY-0095	SD-502	0-12	8/7/2012	Grab	Dark brown, SILT, some clay, trace organics (roots).	Moist, A100.
					Dark brown, SILT, some clay, trace organics (roots),	l
R01-120403CY-0097	SD-503	0-12	8/7/2012	Grab	trace coarse gravel (rocks).	A200.
R01-120403CY-0098	SD-504	0-12	8/7/2012	Grab	Light brown, SILT, trace clay, trace organics (roots), trace coarse gravel (rocks and brick).	A300.
K01-120403C1-0096	30-304	0-12	01112012	Glab	Light brown, SILT and SAND, some organics (grass	7.000.
R01-120403CY-0099	SD-505	0-12	8/7/2012	Grab	and roots), trace coarse gravel (rocks).	A350, next to Resident's fence.
					Light brown, fine SAND, some clay, trace coarse	
R01-120403CY-0100	SD-506	0-12	8/7/2012	Grab	gravel, trace organics (roots).	B000.
					Light brown, fine to coarse SAND, major fine to coarse	
R01-120403CY-0101	SD-507	0-6	8/7/2012	Grab	gravel, trace organics (roots).	B100, refusal after 6 inches.
DO4 4004020V 0400	00.500	0.40	0/7/0040	Cb	Medium brown, fine SAND, little coarse gravel, trace	 B200.
R01-120403CY-0102	SD-508	0-12	8/7/2012	Grab	organics. Medium brown, fine SAND, little coarse gravel, trace	B200.
R01-120403CY-0103	SD-509	0-12	8/7/2012	Grab	lorganics.	B300.
101 120 1000 1 0 100	05 000	<u> </u>	07172012	0.00	Dark brown, fine to medium SAND, little coarse gravel,	
R01-120403CY-0104	SD-510	0-12	8/7/2012	Grab	trace organics.	B400.
					Light brown, fine to coarse SAND, major fine to coarse	
R01-120403CY-0105	SD-511	0-6	8/7/2012	Grab	gravel, trace organics (roots). Dark brown, fine to coarse SAND, some organics, trace	C000, refusal after 6 inches
R01-120403CY-0106	SD-512	0-12	8/7/2012	Grab	coarse gravel.	C100, wet.
101-120-0301-0100	05-012	V-1,2	OTTEOTE	Olab	Dark brown, fine SAND and SILT, little organics, trace	
R01-120403CY-0107	SD-513	0-12	8/7/2012	Grab	coarse gravel.	C200, moist.
			07/0040	0	011.7	5000
R01-120403CY-0108	SD-514	0-12	8/7/2012	Grab	Light brown to brown, SILT, some clay, trace organics. Brown, SAND and SILT, trace organics (grass and	D000, moist.
R01-120403CY-0109	SD-515	0-12	8/7/2012	Grab	roots).	D100.
					Brown to dark brown, medium SAND and SILT, trace	
R01-120403CY-0110	SD-516	0-12	8/7/2012	Grab	coarse gravel, trace organics.	D200, moist.
DO4 4004020V 0444	00 547	0.40	0.77/2042	Cook	Medium to light brown, SILT and fine SAND, trace clay	E000.
R01-120403CY-0111	SD-517	0-12	8/7/2012	Grab	and organics. Medium brown and gray, SILT and CLAY, some fine	E000.
R01-120403CY-0112	SD-518	0-12	8/7/2012	Grab	sand, trace organics.	E100.
					Light brown, fine SAND and SILT, little clay, trace	
R01-120403CY-0113	SD-519	0-12	8/7/2012	Grab	organics. Medium brown, SILT and CLAY, some fine sand, trace	E200.
R01-120403CY-0114	SD-520	0-12	8/7/2012	Grab	fine gravel and organics.	E300.
101-12040301-0114	30-320	0-12	OTTEGIE	0,00	Brown, fine SAND and SILT, some organics (roots),	2000.
R01-120403CY-0115	SD-521	0-12	8/7/2012	Grab	trace coarse gravel.	F000.
	an	0.45	0/7/0045		Light brown, fine to coarse SAND, some silt, trace	F400
R01-120403CY-0116	SD-522	0-12	8/7/2012	Grab	organics and coarse gravel.	F100 F200, saturated in
R01-120403CY-0117	SD-523	0-12	8/7/2012	Grab	Dark brown, ORGANICS.	wetland/stream area.
					Light brown, fine to medium SILT, trace organics, trace	
R01-120403CY-0118	SD-524	0-12	8/7/2012	Grab	coarse gravel.	G000.
B01 1204020V 0440	SD SOF	0.12	9/7/2010	Grah	Light brown to brown, medium SAND and SILT, trace organics	G100, moist.
R01-120403CY-0119	SD-525	0-12	8/7/2012	Grab	Brown, fine to medium SAND and SILT, some organics	G 100, muist.
R01-120403CY-0120	SD-526	0-12	8/7/2012	Grab	(roots), trace coarse gravel.	G200.
R01-120403CY-0121	SD-527	0-12	8/7/2012	Grab	Medium brown, fine SAND, trace gravel, trace organics. Reddish brown, coarse to fine SAND, little coarse	H000.
R01-120403CY-0122	SD-528	0-12	8/7/2012	Grab		H100.
1101-120-10001-0122	00 040	L 0-12	0///2012	U-au	Iararari made esaminos	(* * * * * * *

SEDIMENT SAMPLE DESCRIPTIONS PARK STREET BENNINGTON, VERMONT

Sample Number	Sample Location	Sample Depth (in.)	Collection Date		Sample Description	Comments
R01-120403CY-0123	SD-529	0-12	8/7/2012	Grab	Light brown, fine SAND, trace gravel, trace organics.	H200.
R01-120403CY-0124	SD-530	0-12	8/7/2012	Grab	Dark brown, fine SAND, trace gravel, trace organics.	Н300.
R01-120403CY-0125	SD-531	0-12	8/7/2012	Grab	Medium brown, fine SAND, little silt, trace organics. Medium brown, fine to medium SAND, little silt, trace	1000.
R01-120403CY-0126	SD-532	0-12	8/7/2012	Grab	fine to coarse gravel, trace organics.	1100.
R01-120403CY-0127	SD-533	0-12	8/7/2012	Grab	Medium to light brown, SILT and fine SAND, trace clay and organics.	1200.
R01-120403CY-0128	SD-534	0-12	8/7/2012	Grab	Medium brown, SILT and CLAY, little fine sand, little organics.	1300.
R01-120403CY-0129	SD-535	0-12	8/7/2012	Grab	Light brown, fine to medium SAND and SILT, some organics (roots).	J000.
R01-120403CY-0130	SD-536	0-12	8/7/2012	Grab	Light brown to brown, fine to medium SILT and SAND, some organics, trace coarse gravel.	J100.
R01-120403CY-0131	SD-537	0-12	8/7/2012	Grab	Brown, fine SAND and SILT, little organics (roots).	J200.
R01-120403CY-0132	SD-538	0-12	8/7/2012	Grab	Brown, fine SAND and SILT, some clay, trace organics (roots), trace coarse gravel.	J300, moist.
R01-120403CY-0133	SD-539	0-12	8/7/2012	Grab	Dark brown, fine SAND, little fine to coarse gravel, trace organics.	K100.
R01-120403CY-0134	SD-540	0-12_	8/7/2012	Grab	Medium to light brown, fine SAND, little silt, trace fine gravel, trace organics.	K200.
R01-120403CY-0135	SD-541	0-12	8/7/2012	Grab	Medium brown, fine to medium SAND, little silt, trace organics.	K300.
R01-120403CY-0136	SD-542	0-12	8/7/2012	Grab	Dark gray, SILT, some fine to coarse sand, trace fine to coarse gravel and organics.	K400.
R01-120403CY-0137	SD-543	0-12	8/7/2012	Grab	Medium brown, fine SAND, trace gravel, trace organics.	L300.
R01-120403CY-0138	SD-544	0-12	8/7/2012	Grab	Medium brown, fine to coarse SAND, trace gravel, trace organics.	L400.
R01-120403CY-0139	SD-545	0-12	8/8/2012	Grab	Dark brown to black, SILT, little fine to medium sand, little organics, major coarse gravel.	M300.
R01-120403CY-0140		0-12	8/8/2012		Light brown to dark brown, fine to coarse SAND, little fine to coarse gravel, some organics (roots).	M400.
R01-120403CY-0141		0-12	8/8/2012	Grab	Light to medium brown, SILT, trace organics (roots), trace fine sand.	M500.
R01-120403CY-0142	-	0-12	8/8/2012	Grab	Light brown to brown, SILT, trace organics (roots), trace fine sand.	M600, 20 meters south of GPS point to avoid yard.
R01-120403CY-0143	SD-549	0-6	8/8/2012	Grab	Dark brown, SiLT, some organics (roots), trace coarse gravel.	N500, layer of gray clay starting at 6 inches.
R01-120403CY-0144	SD-550	·0-12	8/8/2012	Grab	Light brown to grey, SILT and CLAY, some fine sand, some organics.	F250, wet.
R01-120403CY-01 <u>45</u>	SD-551	0-12	8/8/2012	Grab	Brown, fine to coarse SAND, some silt, major coarse gravel	Near residential pipe from the duck pond, saturated.
R01-120403CY-0146	SD-552	0-12	8/8/2012	Grab	Brown, fine to coarse SAND and SILT, some fine to coarse gravel, trace organics (roots).	Near EPA MW-104, saturated

GPS = Global Positioning System.

TABLE 3

SUMMARY OF AIR SAMPLE RESULTS PARK STREET SITE BENNINGTON, VERMONT pg/m³

SAMPLE LOCATION SAMPLE NUMBER LÄBORATORY NUMBER DATE SAMPLED	Kitchen D31306 33913-001 7/24/2012	Basement	Dining Room D31308 33913-003 7/24/2012	Second Floor D31309 33913-004 7/24/2012	Living Room D31310 33913-005 7/24/2012
COMPOUND			•		
Total monoCB	142	68.5	113	253	145
Total diCB	3,960 B	20,200 B	2,910 B	6,280 B	4,570 B
Total triCB	17,100	118,000	12,300	23,500	19,500
Total tetraCB	10,700	96,000	10,600	16,300	13,400
Total pentaCB	7,250	9,510	6,180	7,330	10,500
Total hexaCB	2,840	1,230	2,220	1,780	4,150
Total heptaCB	452	263	347	177	607
Total octaCB	36.4	20.2	41.1	ND	50.7
Total nonaCB	ND	ND	ND	ND	ND
Total decaCB	ND	ND	ND	ND	ND
Total Polychlorinated Biphenyls (PCBs)	42,500 B	246,000 B	34,800 B	55,600 B	52,900 B

NOTES:

- 1) Samples were analyzed by Vista Analytical of El Dorado Hills, California using EPA Method 1668A for total PCBs and homologues.
- 2) All results are in picograms per cubic meter (pg/m³).
- 3) ND = Not Detected.
- 4) B = The compound was also detected in the method blank.

PCB FIELD SCREENING RESULTS SOIL AND SEDIMENT SAMPLES COLLECTED AUGUST 2012 PARK STREET SITE BENNINGTON, VERMONT Results in mg/Kg

Sample Number	Aroclor 1242	Sample Location
SD-501	ND	A000 (Wetlands)
SD-502	ND	A100 (Wetlands)
SD-503	ND	A200 (Wetlands)
SD-504	ND	A300 (Wetlands)
SD-505	ND	A350 (Wetlands)
SD-506	ND	B000 (Wetlands)
SD-507	ND	B100 (Wetlands)
SD-507 (Lab Dup)	ND	B100 (Wetlands)
SD-508	ND	B200 (Wetlands)
SD-509	ND	B300 (Wetlands)
SD-510	ND	B400 (Wetlands)
SD-511	ND	C000 (Wetlands)
SD-512	ND	C100 (Wetlands)
SD-513	0.3	C200 (Wetlands)
SD-514	ND ND	D000 (Wetlands)
SD-515	ND	D100 (Wetlands)
SD-516	ND	D200 (Wetlands)
SD-517	ND ND	E000 (Wetlands)
SD-518	ND ND	E100 (Wetlands)
SD-519	ND ND	E200 (Wetlands)
SD-520	ND ND	E300 (Wetlands)
SD-521	ND ND	F000 (Wetlands)
SD-522	ND	F100 (Wetlands)
SD-523	1.0	F200 (Wetlands)
SD-524	ND ND	G000 (Wetlands)
SD-525	ND ND	G100 (Wetlands)
SD-526	ND ND	G200 (Wetlands)
SD-526 (Lab Dup)	ND ND	G200 (Wetlands)
SD-527	ND ND	H000 (Wetlands)
SD-528	ND ND	H100 (Wetlands)
SD-529	ND	H200 (Wetlands)
SD-530	ND ND	H300 (Wetlands)
SD-531	ND ND	I000 (Wetlands)
SD-532	ND	I100 (Wetlands)
SD-532	ND ND	I200 (Wetlands)
SD-534	ND	I300 (Wetlands)
SD-535	ND	J000 (Wetlands)
SD-536	ND	J100 (Wetlands)
SD-537	ND	J200 (Wetlands)
SD-538	ND	J300 (Wetlands)
SD-539	ND	K100 (Wetlands)
SD-540	ND	K200 (Wetlands)
SD-540 (Lab Dup)	ND	K200 (Wetlands)
SD-540 (Lab Dup)	ND ND	K300 (Wetlands)
SD-541	0.3	K400 (Wetlands)
SD-542 SD-543	ND	L300 (Wetlands)
SD-544	ND	L400 (Wetlands)
SD-545	ND ND	M300 (Wetlands)
SD-546	ND	M400 (Wetlands)
SD-547	ND ND	M500 (Wetlands) M600 (Wetlands)
SD-548	ND ND	
SD-549	ND	N500 (Wetlands)
SD-549 (Lab Dup)	ND 0.2	N500 (Wetlands)
SD-550	0.3	F250 (Wetlands)

- ::---

PCB FIELD SCREENING RESULTS SOIL AND SEDIMENT SAMPLES COLLECTED AUGUST 2012 PARK STREET SITE BENNINGTON, VERMONT Results in mg/Kg

Sample Number	Arocior 1242	Sample Location
SD-551	ND	at 410 Park Street
SD-552	ND	at 410 Park Street
P-410-SS-01	ND	at 410 Park Street
P-410-SS-02	ND	at 410 Park Street
P-410-SS-03	ND	at 410 Park Street
P-414-SB-01	ND	at 414 Bowen Road
P-414-SB-02	ND	at 414 Bowen Road
P-414-SB-03	ND	at 414 Bowen Road
P-414-SB-04	ND	at 414 Bowen Road
P-414-SB-05	ND	at 414 Bowen Road
P-414-SB-06	ND	at 414 Bowen Road
P-414-SB-07	ND	at 414 Bowen Road
P-414-SB-08	NÖ	at 414 Bowen Road
P-414-SB-09	ND	at 414 Bowen Road
P-414-SB-10	ND	at 414 Bowen Road
P-414-SB-11	ND	at 414 Bowen Road
P-414-SB-12	ND	at 414 Bowen Road
P-414-SB-12 (Lab Dup)	ND	at 414 Bowen Road
P-538-SB-01	ND	at 538 Bowen Road
P-538-SB-02	. ND	at 538 Bowen Road
P-538-SB-03	ND	at 538 Bowen Road
P-538-SB-04	ND	at 538 Bowen Road
P-538-SB-05	ND	at 538 Bowen Road
P-538-SB-06	ND	at 538 Bowen Road
P-538-SB-07	ND	at 538 Bowen Road
P-538-SB-08	ND	at 538 Bowen Road
P-538-SB-09	ND	at 538 Bowen Road
P-538-SB-10	ND	at 538 Bowen Road
P-538-SB-11	ND	at 538 Bowen Road
P-538-SB-12	ND	at 538 Bowen Road
P-538-SB-13	ND	at 538 Bowen Road
P-538-SB-14	ND	at 538 Bowen Road
P-538-SB-15	ND	at 538 Bowen Road
P-594-SB-01	ND	at 594 Bowen Road
P-594-SB-02	ND	at 594 Bowen Road
P-594-SB-03	ND	at 594 Bowen Road
P-594-SB-04	ND	at 594 Bowen Road
P-594-SB-05	ND	at 594 Bowen Road
P-594-SB-06	ND	at 594 Bowen Road
P-594-SB-07	ND	at 594 Bowen Road
P-594-SB-08	ND	at 594 Bowen Road
P-594-SB-09	ND	at 594 Bowen Road
P-594-SB-10	ND	at 594 Bowen Road
P-594-SB-11	ND	at 594 Bowen Road
P-594-SB-12	ND	at 594 Bowen Road
P-594-SB-13	ND	at 594 Bowen Road
P-594-SB-14	ND	at 594 Bowen Road
P-594-SB-15	ND	at 594 Bowen Road
P-594-SB-16	ND	at 594 Bowen Road
P-594-SB-17	ND	at 594 Bowen Road
P-594-SB-18	ND	at 594 Bowen Road
P-594-SB-19	ND	at 594 Bowen Road
P-594-SB-20	ND	at 594 Bowen Road
P-594-SB-21	ND	at 594 Bowen Road
; P-594-SB-22	ND	at 594 Bowen Road

HRS Reference #88

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PCB FIELD SCREENING RESULTS SOIL AND SEDIMENT SAMPLES COLLECTED AUGUST 2012 PARK STREET SITE BENNINGTON, VERMONT Results in mg/Kg

Sample Number	Aroclor 1242	Sample Location
P-594-SB-23	ND	at 594 Bowen Road
P-594-SB-24	ND	at 594 Bowen Road
P-594-SB-25	ND	at 594 Bowen Road
P-594-SB-26	ND	at 594 Bowen Road
P-594-SB-27	ND	at 594 Bowen Road
P-594-SB-28	ND	at 594 Bowen Road
P-594-SB-28 (Lab Dup)	ND	at 594 Bowen Road
P-594-SB-29	ND	at 594 Bowen Road
P-594-SB-30	ND	at 594 Bowen Road

NOTES:

- Soil samples analyzed using U.S. EPA Office of Environmental Measurement and Evaluation (OEME) Region I SOP, FLDPCB2, PCBs Field Testing for Soil and Sediment Samples.
- 2) PCB = Polychlorinated Biphenyl
- 3) Results in milligrams per Kilogram (mg/Kg).
- PCB reported as "A1242 weathered" could very well be PCB A1016 or PCB A1232.
- 5) ND = Not Detected.
- 6) Lab Dup = Laboratory Duplicate Sample.

SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SOIL AND SEDIMENT SAMPLES COLLECTED IN AUGUST 2012 PARK STREET SITE BENNINGTON, VERMONT Results in mg/Kg

SAMPLE LOCATION SAMPLE NUMBER DEPTH	R01-120403CY-0107	SD-516 R01-120403CY-0110 0-12 inches	SD-519 R01-120403GY-0113-	SD-523 R01-120403CY-0117 0-12 inches
COMPOUND				
Aroclor-1242	0.25 P	ND	ND	3.2 P
Aroclor-1260	ND	ND	ND	ND

SAMPLE LOCATION SAMPLE NUMBER DEPTH	R01-120403CY-0136	SD-545 R01-120403CY-0139 0-12 inches	SD-550 R01-120403CY-0144 0-12 inches	P-410-SS-01 R01-120403CY-0147 0-3 inches
COMPOUND				
Aroclor-1242	0.25	ND	· ND	ND
Aroclor-1260	ND	ND	ND	ND

SAMPLE LOCATION SAMPLE NUMBER DEPTH	R01-120403CY-0148	P-410-SS-03 R01-120403CY-0149	P-414-SB-02 R01-120403CY-0151 9-12 inches	P-414-SB-07 R01-120403CY-0156 -0-12 inches				
COMPOUND				· 				
Aroclor-1242	0.39	ND	ND	ND				
Aroclor-1260	0.22	ND	ND	NDND				

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL3.SOP, PCBs Medium level in Soil and Sediments.
- 2) All Results in Milligrams per Kilogram (mg/Kg).
- 3) ND = Not Detected.
- 4) P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported. See OEME Analytical Data reports.
- 5) *= SD-600 is a field duplicate sample of SD-519 submitted for confirmation analysis.
- 6) ** = P-414-SB-100 is a field duplicate sample of P-414-SB-10 submitted for confirmation analysis.

SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SOIL AND SEDIMENT SAMPLES COLLECTED IN AUGUST 2012 PARK STREET SITE BENNINGTON, VERMONT Results in mg/Kg

SAMPLE LOCATION SAMPLE NUMBER DEPTH	R01-120403CY-0158	P-414-SB-10 R01-120403CŸ-0159	P-538-\$B-01 R01-120403CY-0162	P-538-SB-14 R01-120403CY-0175 0-12 inches
COMPOUND				
Aroclor-1242	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND

SAMPLE LOCATION SAMPLE NUMBER DEPTH	R01-120403CY-0185	P-414-SB-100** R01-120403CY-0186 0-12 inches	P-594-SB-12 R01-120403CY-0190 0-12 inches	P-594-SB-17 R01-120403CY-0195 0-12 inches
COMPOUND				_
Aroclor-1242	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND

SAMPLE LOCATION SAMPLE NUMBER DEPTH	R01-120403CY-0198			**	****	><	¥.		£.	3% **	**	~°*	1.	00) A	**	ά¢
COMPOUND	_																
Aroclor-1242	ND	- 1. //															
Aroclor-1260	ND	, , \$, x	· "ξ		. 1. m	\$ + 1 ×	. *	A N	, <u>8.5</u>	- €	***	× 3. 4	**************************************	× % 3	\$. V. 8		% <i>2</i> ∶

NOTES:

- 1) Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL3.SOP, PCBs Medium level in Soil and Sediments.
- 2) All Results in Milligrams per Kilogram (mg/Kg).
- 3) ND = Not Detected.
- 4) P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported. See OEME Analytical Data reports.
- 5) *= SD-600 is a field duplicate sample of SD-519 submitted for confirmation analysis.
- 6) ** = P-414-SB-100 is a field duplicate sample of P-414-SB-10 submitted for confirmation analysis.

Page 2 of 2

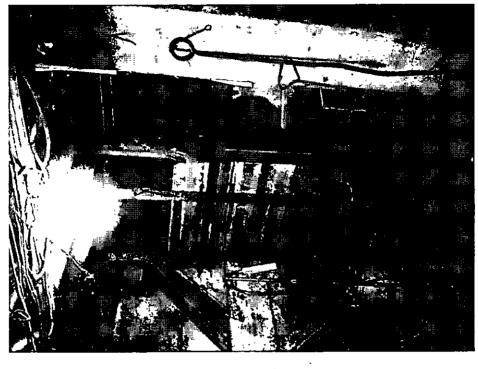
Appendix C

Photodocumentation Log

HRS Reference #88

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PHOTODOCUMENTATION LOG Park Street Site • Bennington, Vermont



SCENE: View of air sample collected from the basement at 403 Park Street.

DATE: 24 July 2012 PHOTOGRAPHER: J. Burton TIME: 1203 hours CAMERA: iPhone 4S



OP

SCENE: View of air sample collected in the living room at 403 Park Street.

DATE: 24 July 2012 PHOTOGRAPHER: J. Burton

TDD No. 12-03-0002 HRS Reference #88 TIME: 1222 hours CAMERA: iPhone 4S

Page 1 of 8

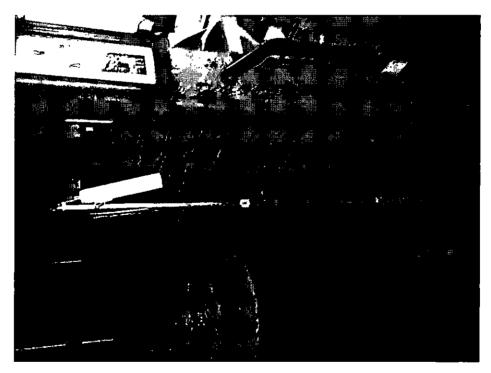
TASK No. 0779 Page 35 of 165

PHOTODOCUMENTATION LOG Park Street Site • Bennington, Vermont



SCENE: View of air sample collected in the dining room at 403 Park Street.

DATE: 24 July 2012 TIME: 1223 hours PHOTOGRAPHER: J. Burton CAMERA: iPhone 4S



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SCENE: View of air sample collected in the kitchen at 403 Park Street.

Frank

DATE: 24 July 2012 PHOTOGRAPHER: J. Burton TIME: 1223 hours CAMERA: iPhone 4S

TDD No. 12-03-0002 HRS Reference #88 Page 2 of 8

TASK No. 0779 Page 36 of 165



SCENE: View of air sample collected from the second floor of 403 Park Street.

DATE: 25 July 2012 TIME: 1209 hours PHOTOGRAPHER: J. Burton CAMERA: iPhone 4S



SCENE: View of the Walloomsac River at the edge of the wetland sampling area. Photograph taken facing south.

DATE: 8 August 2012 PHOTOGRAPHER: L. Long TIME: 0804 hours CAMERA: iPhone 4S

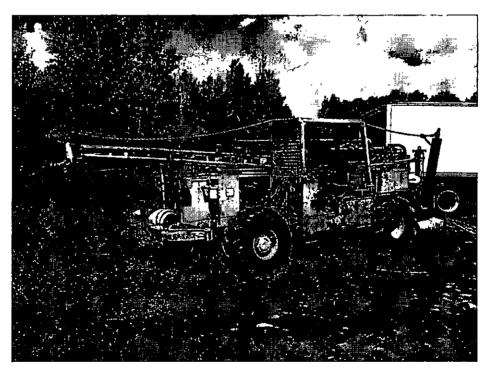
TDD No. 12-03-0002 HRS Reference #88 Page 3 of 8

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SCENE: View in the middle of the wetland sampling area. Photograph taken facing east.

DATE: 8 August 2012 TIME: 1413 hours **PHOTOGRAPHER:** S. Bitzas CAMERA: iPhone 4S



SCENE: View of New Hampshire Boring, Inc. drilling rig (CME-550X).

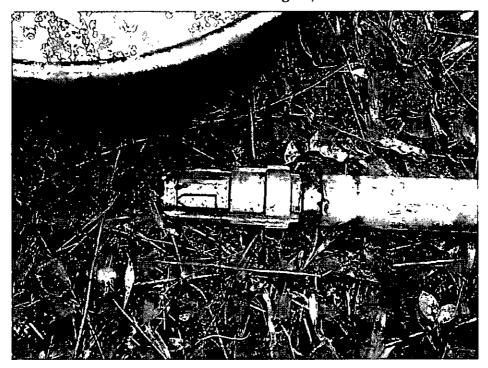
DATE: 16 August 2012 TIME: 1215 hours **PHOTOGRAPHER:** G. Mavris CAMERA: iPhone 4S

TDD No. 12-03-0002 HRS Reference #88

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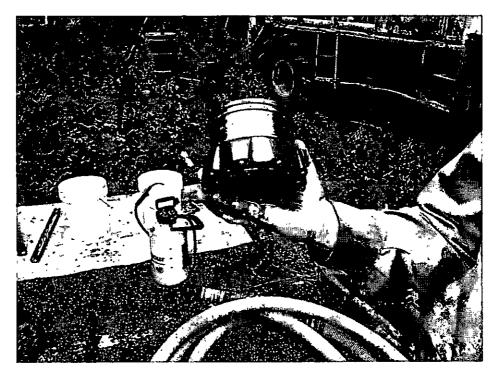
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SCENE: Air hammer used in the ODEX drilling method.

DATE: 14 August 2012 TIME: 1302 hours
PHOTOGRAPHER: G. Mavris CAMERA: iPhone 4S



SCENE: Close-up view of pilot bit with the carbide teeth, used in the ODEX drilling method.

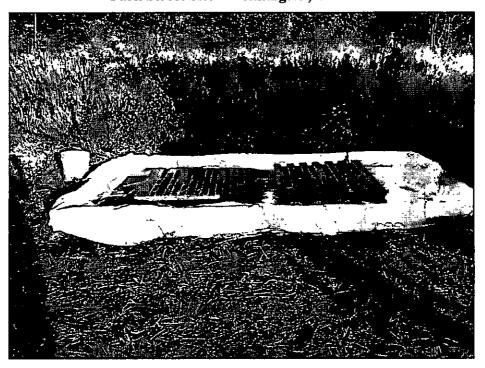
DATE: 28 August 2012 TIME: 1057 hours PHOTOGRAPHER: G. Mavris CAMERA: iPhone 4S

TDD No. 12-03-0002 HRS Reference #88

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TASK No. 0779 Page 39 of 165



SCENE: Decontamination pad set up east of the shopping plaza. .

DATE: 28 August 2012 TIME: 1057 hours **PHOTOGRAPHER:** G. Mavris CAMERA: iPhone 4S



SCENE: View of New Hampshire Boring, Inc. (NHB) drilling at EPA-105. Photograph taken facing east.

DATE: 17 August 2012 TIME: 0810 hours
PHOTOGRAPHER: G. Mavris CAMERA: iPhone 4S

TDD No. 12-03-0002 HRS Reference #88 Page 4.

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TASK No. 0779 Page 40 of 165



SCENE: View of New Hampshire Boring, Inc. (NHB) drilling at EPA-101 (residential property). Photograph taken facing

west.

DATE: 22 August 2012 **TIME:** 1623 hours **PHOTOGRAPHER:** G. Mavris **CAMERA:** iPhone 4S



SCENE: View of New Hampshire Boring, Inc. (NHB) drilling at EPA-107 (residential property). Photograph taken facing

west.

DATE: 29 August 2012 TIME: 0822 hours
PHOTOGRAPHER:-G. Mavris CAMERA: iPhone 4S

TDD No. 12-03-0002 Page 7 of 8 TASK No. 0779

HRS Reference #88 Page 41 of 165



SCENE: New Hampshire Boring, Inc. (NHB) installing EPA-104S in wetland area. Photograph taken facing northeast.

DATE: 22 August 2012 TIME: 0809 hours PHOTOGRAPHER: G. Mavris CAMERA: iPhone 4S



SCENE: View of investigation-derived waste (IDW) drum staging area located east of shopping plaza. Photograph taken

facing west.

DATE: 30 August 2012 TIME: 1425 hours PHOTOGRAPHER: G. Mavris CAMERA: iPhone 4S

7 .5...... Page 8 of 8 TASK No. 0779 TDD No. 12-03-0002 . age 42 of 13 Page 42 of 165

Appendix D

Chain-of-Custody Record

HRS Reference #88 Local 1. Page 43 of 165

Case No. 0842F

CHAIN OF CUSTODY RECORD

Project Code: 12-03-0002 Contact Name: John Burton Contact Phone: 978-552-2130 No: 1-072612-101519-0003

DateShipped: 7/26/2012 AirbillNo: 8726484219280200

Sample #	Location	Analyses	Matrix	Collected	Sample Time	Volume	Vol Units	Avg_Flow	Flow_Units
D31306	Kitchen	M1668	Air	7/24/2012	12:18	4996.53	Liters	3.465	L/min
D31307	Basement	M1668	Air	7/24/2012	12:03	5322.96	Liters	3.696	L/min
D31308	Dining Room	M1668	Air	7/24/2012	12:22	4912.89	Liters	3.407	L/min
D31309	Second Floor	M1668	Air	7/24/2012	12:15	4890.24	Liters	3.396	L/min
D31310	Living Room	M1668	Air	7/24/2012	12:20	4895.59	Liters	3.395	L/min
D31311	Field Blank	. M1668	Air	7/24/2012	12:25				
D31312	Lot Blank	M1668	Air	7/25/2012	12:30				
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	D31306 D31307 D31308 D31309 D31310 D31311	D31306 Kitchen D31307 Basement D31308 Dining Room D31309 Second Floor D31310 Living Room D31311 Field Blank	D31306 Kitchen M1668 D31307 Basement M1668 D31308 Dining Room M1668 D31309 Second Floor M1668 D31310 Living Room M1668 D31311 Field Blank M1668	D31306 Kitchen M1668 Air D31307 Basement M1668 Air D31308 Dining Room M1668 Air D31309 Second Floor M1668 Air D31310 Living Room M1668 Air D31311 Field Blank M1668 Air	D31306 Kitchen M1668 Air 7/24/2012 D31307 Basement M1668 Air 7/24/2012 D31308 Dining Room M1668 Air 7/24/2012 D31309 Second Floor M1668 Air 7/24/2012 D31310 Living Room M1668 Air 7/24/2012 D31311 Field Blank M1668 Air 7/24/2012	D31306 Kitchen M1668 Air 7/24/2012 12:18 D31307 Basement M1668 Air 7/24/2012 12:03 D31308 Dining Room M1668 Air 7/24/2012 12:22 D31309 Second Floor M1668 Air 7/24/2012 12:15 D31310 Living Room M1668 Air 7/24/2012 12:20 D31311 Field Blank M1668 Air 7/24/2012 12:25	D31306 Kitchen M1668 Air 7/24/2012 12:18 4996.53 D31307 Basement M1668 Air 7/24/2012 12:03 5322.96 D31308 Dining Room M1668 Air 7/24/2012 12:22 4912.89 D31309 Second Floor M1668 Air 7/24/2012 12:15 4890.24 D31310 Living Room M1668 Air 7/24/2012 12:20 4895.59 D31311 Field Blank M1668 Air 7/24/2012 12:25	D31306 Kitchen M1668 Air 7/24/2012 12:18 4996.53 Liters D31307 Basement M1668 Air 7/24/2012 12:03 5322.96 Liters D31308 Dining Room M1668 Air 7/24/2012 12:22 4912.89 Liters D31309 Second Floor M1668 Air 7/24/2012 12:15 4890.24 Liters D31310 Living Room M1668 Air 7/24/2012 12:20 4895.59 Liters D31311 Field Blank M1668 Air 7/24/2012 12:25	D31306 Kitchen M1668 Air 7/24/2012 12:18 4996.53 Liters 3.465 D31307 Basement M1668 Air 7/24/2012 12:03 5322.96 Liters 3.696 D31308 Dining Room M1668 Air 7/24/2012 12:22 4912.89 Liters 3.407 D31309 Second Floor M1668 Air 7/24/2012 12:15 4890.24 Liters 3.396 D31310 Living Room M1668 Air 7/24/2012 12:20 4895.59 Liters 3.395 D31311 Field Blank M1668 Air 7/24/2012 12:25 4895.59 Liters 3.395

		SAMPLES TRANSFERRED FROM
Special Instructions: Total PCBs reporting limit 0.01 ug/m3.		CHAIN OF CUSTODY #
	•	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Page 1 of 2

Samplers Signatures

CHAIN OF CUSTODY RECORD

Project Code: Park Street Contact Name: Cathy Young Contact Phone: 617-918-1217 No: 1-080912-105002-0004

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY#

DateShipped: 8/9/2012

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSD
	R01-120403CY-0107	SD-513	C200	PCBs	Sediment	8/7/2012	10:30	1	8 oz Amber	
	R01-120403CY-0110	SD-516	D200	PCBs	Sediment	8/7/2012	10:42	1	8 oz Amber	
1	R01-120403CY-0113	SD-519	E200	PCBs	Sediment	8/7/2012	10:00	1	8 oz Amber	
•	R01-120403CY-0117	SD-523	F200	PCBs	Sediment	8/7/2012	12:30	1	8 oz Amber	
	R01-120403CY-0136	SD-542	K400	PCBs	Sediment	8/7/2012	14:50	1	8 oz Amber	
	R01-120403CY-0139	SD-545	M300	PCBs	Sediment	8/8/2012	08:00	1	8 oz Amber	
	R01-120403CY-0144	SD-550	F250	PCBs	Sediment	8/8/2012	08:15	2	8 oz Amber	Y
	R01-120403CY-0147	P-410-SS-01	Near tank	PCBs	Soil	8/8/2012	10:21	1	4 oz Amber	
	R01-120403CY-0148	P-410-SS-02	Wall near tank	PCBs	Soil	8/8/2012	10:26		4 oz Amber	
•	R01-120403CY-0149	P-410-6S-03	Wall near well	PCBs ·	Soil	8/8/2012	10:30	1	4 oz Amber	
	R01-120403CY-0151	P-414-SB-02		PCBs	Soil	8/8/2012	12:00	1	4 oz Amber	
	R01-120403CY-0156	P-414-SB-07		PCBs	Soil	8/8/2012	12:00	1	4 oz Amber	
	R01-120403CY-0158	P-414-SB-09		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0159	P-414-SB-10		PCBs,	Soil	8/8/2012	11:15	1	4 oz Amber	
•	R01-120403CY-0162	P-538-SB-01	A100	PCBs	Soil	8/8/2012	14:40	1	4 oz Amber	
	R01-120403CY-0175	P-538-SB-14	D000	PCBs	Soil	8/8/2012	14:05	2	4 oz Amber	Y
	R01-120403CY-0185	SD-600	E200	PCBs	Sediment	8/7/2012	10:00	1	8 oz Amber	
*******	R01-120403CY-0186	P-414-SB-100		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0190	P-594-SB-12	C150	PCBs	Sôil _	8/9/2012	09:10	1,	4 oz Amber	

Items/Réason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Tim
	1/19	8/9/12	Quat Cll	8-9-12	1250/	,	Scott Cly	81012	fair)	8/4/12	11:11
	001	77							11		
							-7				

Special Instructions:

CHAIN OF CUSTODY RECORD

No: 1-080912-105002-0004

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY#

Samplers Signatures

Project Code: Park Street Contact Name: Cathy Young

DateShipped: 8/9/2012

Contact Phone: 617-918-1217

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	M8/MSD
	R01-120403CY-0195	P-594-SB-17	E000	PCBs	Soll	8/9/2012	09:30	1	4 oz Amber	
	R01-120403CY-0198	P-594-SB-20	E150	PCBs	Soil	8/9/2012	10:20	1	4 oz Amber	
	R01-120403CY-0209	TT2814		PCBs	Soil	8/9/2012	11:00	1	2 oz Amber	_
	R01-120403CY-0210	RB-01	auger head	PCBs	Filtered Water	8/9/2012	11:30	2	1 liter amber	
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items/Reason	Relinquistled by	Date	Received by	Date -	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	for	8/1/12	Putt CMI	8-9-12	12:50	id	Dutt Uff	8-10-12	Aug	8/9/12	11.20
	100	77	(//				1,1			1	
1											
								: 			

Special Instructions:

Page 1 of 1

USEPA

CHAIN OF CUSTODY RECORD

No: 1-100112-141118-0006

DateShipped: 8/30/2012 CarrierName: Hand Deliver Park Street/MA Case #: Cooler #: Lab: NERL Lab Phone:

AirbillNo:

Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSD	Sample_Remarks
	R01-120403CY-0213	GW-100	PCBs	Ground Water	9/27/2012	13:15	1	1 liter amber		
-	R01-120403CY-0214	GW-101	PCBs	Ground Water	9/27/2012	12:50	1	1 liter amber		
-	R01-120403CY-0215	GW-102	PCBs	Ground Water	9/26/2012	15:00	1	1 liter amber		
	R01-120403CY-0216	GW-103	PCBs	Ground Water	9/26/2012	12:25	1	1 liter amber		
_	R01-120403CY-0217	GW-104S	PCBs	Ground Water	9/26/2012	15:45	1	1 liter amber		
	R01-120403CY-0218	GW-104D	PCBs	Ground Water	9/26/2012	15:00	1	1 liter amber		
-	R01-120403CY-0219	GW-105	PCBs	Ground Water	9/26/2012	15:20	1	1 liter amber		
	R01-120403CY-0220	GW-106S	PCBs	Ground Water	9/26/2012	17:45	1	1 liter amber		
	R01-120403CY-0221	GW-106D	PCBs	Ground Water	9/27/2012	11:30	1	1 liter amber	_	
	R01-120403CY-0222	GW-107	PCBs	Ground Water	9/26/2012	18:05	1	1 liter amber		
_	R01-120403CY-0223	GW-108S	PCBs	Ground Water	9/27/2012	13:00	1	1 liter amber		
	R01-120403CY-0224	GW-108D	PCBs	Ground Water	9/27/2012	11:10	1	1 liter amber		
	R01-120403CY-0225	GW-109	PCBs	Ground Water	9/26/2012	15:00	1	1 liter amber		
	R01-120403CY-0226	RB-01	PCBs	Water	9/27/2012	15:00	1	1 liter amber		
•	R01-120403CY-0227	PE-AA0269	PCBs	PE Water	9/26/2012	07:00	1	ampule	_	
	R01-120403CY-0228	GW-102-F	PCBs	Ground Water	9/26/2012	15:10	1	1 liter amber		
	R01-120403CY-0229	GW-101-F	PCBs	Ground Water	9/27/2012	12:55	1	1 liter amber		
1	R01-120403CY-0230	GW-106D-F	PCBs	Ground Water	9/27/2012	11:35	1	1 liter amber		

		SAMPLES TRANSFERRED FROM
Special Instructions:	4	CHAIN OF CUSTODY#
	•	

11:15

1 1 liter amber

9/27/2012

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
_											
,											

R01-120403CY-0231

GW-108D-F

PCBs

Ground Water

Appendix E

Analytical Data

Analytical Results Only Memorandum Analytical Data Packages Analytical Data Packages Air PUF samples for total PCBs and homologues PCBs in Soil Field Analytical Results PCBs in Water Low Level PCBs Medium Level in Soil and Sediment

HRS Reference #88

Pane Aft n.) 1

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August 15, 2012

Vista Project I.D.: 33913

Mr. John C. Burton Weston Solutions, Inc. 3 Riverside Drive Andover, MA 01810

Dear Mr. Burton,

Enclosed are the results for the seven PUF samples received at Vista Analytical Laboratory on July 27, 2012 under your Project Name "12-03-0002". These samples were extracted and analyzed using EPA Method 1668A for total PCBs and homologues. A standard turnaround time was provided for this work.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at calvin@vista-analytical.com. Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Calvin Tanaka Senior Scientist

helab.

Visia Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable text methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Visia Analytical Laboratory.



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Extraction Information	29
Sample Data - EPA Method 1668A	33
Continuing Calibration	449
Initial Calibration	500

page them . .

Vista Project No. 33913 Case Narrative

Sample Condition on Receipt:

On July 27, 2012, Vista Analytical Laboratory received a total of seven PUF samples. The samples were received in good condition, but above the 6°C temperature requirements at 8.8°C. Mr. John Burton was notified of the temperature anomaly on July 27, 2012 and provided direction to proceed with the analysis. The samples were received and stored securely in accordance with Vista standard operating procedure (SOP) and EPA methodology.

Procedural Notes:

The method blank, field blank D31311 (Vista Analytical: 33913-006), and lot blank sample D31312 (Vista Analytical: 33913-007) results are based on 5,000 liters or 5.0 cubic meters of sample. This volume is comparable to the volume collected for the field samples.

The samples were extracted and analyzed for total polychlorinated biphenyls (PCBs) by EPA Method 1668A using a DB-1 GC column.

Analytical Notes:

EPA Method 1668A:

Holding Times

The method and SOP holding time criteria were met for the samples.

Quality Control:

The Initial and Continuing calibration verifications were within the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample was extracted and analyzed with the preparation batch. Total Dichlorobiphenyls were detected in the Method Blank. The OPR recoveries were within control limits.

Labeled Standard recoveries for all QC and field samples were within control limits.

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Section I: Sample Inventory Report

Date Received:
Project No.:

7/27/2012 33913

Project.	No.:
Project	Name:

12-03-0002

Lab. Sample ID	Client Sample ID	Component ID	
001	D31306	PUF	
002	D31307	PUF	
003	D31308	PUF	
004	D31309	PUF	
005	D31310	PUF	
006	D31311	PUF	
007	D31312	PUF	

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ANALYTICAL RESULTS

HRS Reference #88 - months to 165 Page 53 of 165

Method Blank						EPA Method 1668
Matrix: PUF Sample Size: 5.0 m3		Batch No.: Extracted:	4585 4-Aug-12		MB001 Aug-12	
Analyte	Conc. (pg/m3)	RL ^a	Qualifiers	Labeled Standard	%R	LCL-UCL b Qualifiers
Total monoCB	ND	10.0	-	IS 13C-PCB-1	- 51.4	25 - 150
Total diCB	28.0	20.0		13C-PCB-3	57.7	25 - 150
Total triCB	ND	10.0	· -	13C-PCB-4	79.4	25 - 150
Total tetraCB	ND	10.0		13C-PCB-11	84.3	25 - 150
Total pentaCB	ND	10.0		13C-PCB-9	80.5	25 - 150
Total hexaCB	ND	10.0		13C-PCB-19	52.4	25 - 150
Total heptaCB	ND	10.0	· -	13C-PCB-28	78.1	25 - 150
Total octaCB	ND	10.0		13C-PCB-32	52.2	25 - 150
Total nonaCB	ND	10.0		13 <u>C</u> -PCB-37	76.4	25 - 150
Total decaCB	ND	10.0		13C-PCB-47	86.2	25 - 150
Total PCB	28.0	20.0		13C-PCB-52	83.9	25 - 150
				13C-PCB-54	80.9	25 - 150
_	, ,		· ·	13C-PCB-70	_ 102	25 - 150
				13C-PCB-77	90.1	25 - 150
				13C-PCB-80	96.0	25 - 150
				13C-PCB-81	95.2	25 - 150
_				13C-PCB-95	98.9	25 - 150
•				13C-PCB-97	99.6	25 - 150
-		,		13C-PCB-101	100	25 - 150
				13C-PCB-104	84.6	25 - 150
•				13C-PCB-105	65.5	25 - 150
				13C-PCB-114	72.7	25 - 150
-				13C-PCB-118	90.9	25 - 150
			**	13C-PCB-123	96.8	25 - 150
				13C-PCB-126	61.1	25 - 150
				13C-PCB-127	66.2	25 - 150
				13C-PCB-138	84.4	25 - 150
				13C-PCB-141	85.5	25 - 150
*		•	**	13C-PCB-153	_ 85.9	25 - 150

Method Bla	nk						_		EPA Mo	ethod 1668A
Matrix: Sample Size:	PUF 5.0 m3		Batch No.: Extracted:	4585 4-Aug-12		Sample: Analyzed DB-1:	0-MB001 6-Aug-12			
Analyte	·	Conc. (pg/m3)	RL ^a	Qualifiers		Labeled Standa	ırd	%R	LCL-UCL ^b	Qualifiers
						13C-PCB-155		114	25 - 150	
				-		13C-PCB-156		99.7	25 - 150	
						13C-PCB-157		104	25 - 150	_
	*	÷		-	- ,	13C-PCB-159	-	93.1	25 - 150	
		-				13C-PCB-167		98.2	25 - 150	_
				••		13C-PCB-169	-	93.5	25 - 150	-
20			-			13C-PCB-170		103	25 - 150	
				•		13C-PCB-180		120	25 - 150	
		•	·			13C-PCB-188		82.3	25 - 150	
~		•				13C-PCB-189		106	25 - 150	-
						13C-PCB-194		92.8	25 - 150	
	-			, ,		13C-PCB-202		111	25 - 150	_
						13C-PCB-206		106	25 - 150	
F-111 - W F		100-01				13C-PCB-208	****	107	25 - 150	
						13C-PCB-209		95.7	25 - 150	
	,				<u>PS</u>	13C-PCB-79		98.4	30 - 135	
						13C-PCB-178		80.8	30 - 135	
				-	a, Rep	oorting limit.		_		
					b Lov	wer control limit - upp	er control limit			

	Analyst:	ANP	Page 2 of 2 Approved By: Calvin Tanaka 15-Aug-2012 14:56
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OPR Results		© 24	1226 (1441) (A CONTRACTOR OF THE CONTRACTOR	: \$\$.	A STATE OF THE STA	2 25 5.75 5.75 5 5.75 5.75 6 5.75	EPA M	ethod 1668A
Matrix:	PUF	(QC Batch No.:	4585	Lab S	sample:	0-OPR001		
Sample Size:	Sample	1	Date Extracted:	4-Aug-12	Date A	Analyzed DB-1:	6-Aug-12		
Analyte		Spike Conc.	Conc. (ng/mL)	OPR Limits		Labeled Standard		LCL-UCL	Qualifier
PCB-3		50.0	65.7	25 - 75	IS	13C-PCB-1	43.5	25 - 150	
PCB-15		100	124	50 - 150		13C-PCB-3	51.3	25 - 150	
PCB-28		50.0	36.9	25 - 75	1	13C-PCB-4	70.8	25 - 150	
PCB-77		50.0	47.7	25 - 75		13C-PCB-11	81.6	25 - 150	
PCB-106/118		100	100	50 - 150	1	13C-PCB-9	73.8	25 - 150	
PCB-156		50.0	45.3	25 - 75		13C-PCB-19	55.1	25 - 150	
PCB-180		50.0	48.8	25 - 75		13C-PCB-28	74.7	25 - 150	
PCB-202		50.0	50.9	25 - 75	1	13C-PCB-32	54.1	25 - 150	
PCB-207		50.0	47.1	25 - 75		13C-PCB-37	88.7	25 - 150	
PCB-209		50.0	48.9	25 - 75	!	13C-PCB-47	84.8	25 - 150	
					ļ	13C-PCB-54	74.8	25 - 150	
					ĺ	13C-PCB-70	92.2	25 - 150	
						13C-PCB-77.	84.0	25 - 150	
						13C-PCB-80	94.4	25 - 150	
						13C-PCB-81	84.7	25 - 150	
						13C-PCB-95	96.9	25 - 150	
						13C-PCB-97	97.5	25 - 150	
						13C-PCB-101	101	25 - 150	
						13C-PCB-104	83.8	25 - 150	
						13C-PCB-105	79.7	25 - 150	
						13C-PCB-114	84.3	25 - 150	
						13C-PCB-118	92.9	25 - 150	
						13C-PCB-123	96.0	25 - 150	
						13C-PCB-126	76.6	25 - 150	
						13C-PCB-127	81.4	25 - 150	
						13C-PCB-138	96.5	25 - 150	
						13C-PCB-141	104	25 - 150	
						13C-PCB-153	102	25 - 150	
						13C-PCB-155	105	25 - 150	
						13C-PCB-156	86.0	25 - 150	
						13C-PCB-157	93.9	25 - 150	
						13C-PCB-159	95.9	25 - 150	
						13C-PCB-167	91.5	25 - 150	
						13C-PCB-169	85.5	25 - 150	
						13C-PCB-170	111	25 - 150	
						13C-PCB-180	99.7	25 - 150	
						13C-PCB-188	101	25 - 150	
						13C-PCB-189	124	25 - 150	
					,	13C-PCB-194	92.8	25 - 150	

OPR Results					an in the second		EPA Method 1668A
Matrix:	PUF		QC Batch No.:	4585	Lab Sample:	0-OPR001	
Sample Size:	Sample		Date Extracted:	4-Aug-12	Date Analyzed DB-1:	6-Aug-12	
Analyte		Spike Conc.	Conc. (ng/mL)	OPR Limits			
					13C-PCB-202 13C-PCB-206 13C-PCB-208 13C-PCB-209	103 102 110 87.8	25 - 150 25 - 150 25 - 150 25 - 150
					;		

Chemist: ANP

Sample ID: D3130	6					EPA I	Method 1668A
Project: 12-03-00	ul-12	Sample Da Matrix: Sample Si	ta PUF ze: 4.997 m3	Laboratory Data Lab Sample: 33913-001 QC Batch No.: 4585 Date Analyzed DB-1: 6-Aug-12		Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers	Labeled Standard	%R	LCL-UCL	b Qualifiers
Total monoCB	142	10.0		IS 13C-PCB-1	40.3	25 - 150	
Total diCB	3960	20.0	В	13C-PCB-3	43.3	25 - 150	
Total triCB	17100	10.0	-	13C-PCB-4	76.1	25 - 150	
Total tetraCB	10700	10.0		13C-PCB-11	85.6	25 - 150	
Total pentaCB	7250	10.0		13C-PCB-9	79.2	25 - 150	- ' ' ' '
Total hexaCB	2840	10.0		13C-PCB-19	42.4	25 - 150	
Total heptaCB	453	10.0		13C-PCB-28	84.4	25 - 150	
Total octaCB	36.4	10.0		13C-PCB-32	46.9	25 - 150	
Total nonaCB	_ ND _	10.0		13C-PCB-37	90.4	25 - 150	
Total decaCB	ND	10.0		13C-PCB-47	79.4	_25 - 150	
Total PCB	42500	20.0	В	13C-PCB-52	78.8	25 - 150	
				13C-PCB-54	65.3	25 - 150	
12 (2 - 1 - 16	* 14	,	· · · · · · · · · · · · · · · · · · ·	13C-PCB-70	89.2	. 25 - 150	~ .
				13C-PCB-77	83.9	25 - 150	
				13C-PCB-80	95.5	25 - 150	
				13C-PCB-81	90.1	25 - 150	
			,	13C-PCB-95	86.9	25 - 150	4.11
_				13C-PCB-97	94.4	25 - 150	
·				13C-PCB-101	92.3	25 - 150	
				13C-PCB-104	77.5	25 - 150	
			- -	13C-PCB-105	58.8	25 - 150	-
				13C-PCB-114	70.4	25 - 150	_
	1			13C-PCB-118	89.7	25 - 150	
				13C-PCB-123	93.9	25 - 150	
• 1 Kumum			.	13C-PCB-126	61.0	25 - 150	*
				13C-PCB-127	59.4	25 - 150	
				13C-PCB-138	87.5	25 - 150	î 1

Page 1 of 2

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Sample ID: D31306	mple ID: D31306					EPA Method 1668A				
Client Data		Sample D			oratory Data					
Name: Weston Sol		Matrix:	PUF		Sample: 33913-001		Date Received:			
Project: 12-03-0002		Sample S	lize: 4.997 m3	QC B	atch No.: 4585		Date Extracted:	4-Aug-12		
Date Collected: 24-Jul- Time Collected: 1218	12			Date.	Analyzed DB-1: 6-Aug-12					
11110 001101101	<u> </u>	a		+			t)		
Analyte	Conc. (pg/m3)	RL	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers		
					13C-PCB-141	88.1	25 - 150	•		
•				- 1	13C-PCB-153	- 87.8	= 25 - 150	_		
					13C-PCB-155	93.9	25 - 150			
+	-		•		13C-PCB-156	83.4	25 - 150			
			-		13C-PCB-157	87.2	25 - 150			
					13C-PCB-159	90.3	25 - 150			
-	-	•		1	13C-PCB-167	89.6	25 - 150			
			•		13C-PCB-169	74.1	25 - 150			
			•	-	13C-PCB-170	84.0	25 - 150			
					13C-PCB-180	83.7	25 - 150			
		•	-		13C-PCB-188	83.6	25 - 150			
				İ	13C-PCB-189	75.8	25 - 150			
			-		13C-PCB-194	89.3	25 - 150	,		
·					13C-PCB-202	91.5	25 - 150			
			,	'	13C-PCB-206	107	25 - 150	-		
•					13C-PCB-208	107	25 - 150			
					13C-PCB-209	93.5	25 - 150			
		•		PS	13C-PCB-79	102	30 - 135			
					13C-PCB-178	112	30 - 135	-		
		_ ^		a. Rei	porting limit.		22 .30			
	-		- -	' '	wer control limit - upper control li	mit.				

			
Analyst: DMS	Page 2 of 2	Approved By: Calvin T	anaka 15-Aug-2012 14:56

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Sample ID: D3130) 7				•	EPA I	Method 1668 <i>A</i>
Project: 12-03-00	Jul-12	Sample Da Matrix: Sample S	PUF ize: 5.323 m3	Laboratory Data Lab Sample: 33913-002 QC Batch No.: 4585 Date Analyzed DB-1: 6-Aug-	-12	Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers	Labeled Standard	%R	LCL-UCL	b Qualifiers
Total monoCB	68.5	9.39		IS 13C-PCB-1	- 40.5	25 - 150	
Total diCB	20200	18.8	В	13C-PCB-3	45.4	25 - 150	
Total triCB	118000	9.39		13C-PCB-4	78.0	25 - 150	
Total tetraCB	96000	9.39		13C-PCB-11	85.6	25 - 150	
Total pentaCB	9510	9.39	p.m.	13C-PCB-9	78.6	25 - 150	
Total hexaCB	1230	9.39		13C-PCB-19	41.8	25 - 150	
Total heptaCB	263	9.39		13C-PCB-28	93.0	25 - 150	
Total octaCB	20.2	9.39		13C-PCB-32	47.9	25 - 150	
Total nonaCB	ND	9.39		13C-PCB-37	88.9	25 - 150	
Total decaCB	ND	9.39	_	13C-PCB-47	82.6	25 - 150	
Total PCB	246000	18.8	В	13C-PCB-52	80.3	25 - 150	
				13C-PCB-54	68.5	25 - 150	
				13C-PCB-70	96.3	25 - 150	
				13C-PCB-77	79.8	25 - 150	
-	-			13C-PCB-80	96.5	_ 25 - 150	
-	-			13C-PCB-81	87,3	25 - 150	
_		-	-	13C-PCB-95	94.4	25 - 150	
				13C-PCB-97	97.6	25 - 150	
				13C-PCB-101	98.7	25 - 150	
	-			13C-PCB-104	82.7	25 - 150	
i :		•		13C-PCB-105	- 69.0	25 - 150	
i •				13C-PCB-114	68.8	25 - 150	
*	-			13C-PCB-118	86.4	25 - 150	
				13C-PCB-123	91.6	25 - 150	
				13C-PCB-126	63.9	25 - 150	
		•		13C-PCB-127	70.5	25 - 150	
س الله ا		who.		13C-PCB-138	92.4	25 - 150	n v

Sample ID: D31	307		EPA Method 1668A					
Client Data		Sample	Data	Lab	oratory Data			
	on Solutions, Inc.	Matrix:	PUF	Lab'S	Sample: 33913-002		Date Received:	27-Jul-12
-	-0002	Sample	Size: 5.323 m3	QC B	atch No.: 4585		Date Extracted:	4-Aug-12
Date Collected: 2	24-Jul-12			Date.	Analyzed DB-1: 6-Aug-12			
Time Collected: 1	203							<u> </u>
Analyte	Conc. (pg/m3)	RL a	Qualifiers		Labeled Standard	%R	LCL-UCL	Oualifiers
					13C-PCB-141	92.4	25 - 150	
			_		13C-PCB-153	93.5	25 - 150	
					13C-PCB-155	102	25 - 150	
			ē		13C-PCB-156	76.8	25 - 150	_
-	•		~ 		13C-PCB-157	83.0	25 - 150	
•					13C-PCB-159	93.0	25 - 150	
					13C-PCB-167	85.2	25 - 150	
			-		13C-PCB-169	80.4	25 - 150	
- Andrew		-	• -		13C-PCB-170	89.9	25 - 150	
- 1				ŀ	13C-PCB-180	89.3	25 - 150	
					13C-PCB-188	86.6	25 - 150	
	T.				13C-PCB-189	83.0	25 - 150	
	-				13C-PCB-194	93.2	25 - 150	
	-		-		13C-PCB-202	84.6	25 - 150	
				,	13C-PCB-206	102	25 - 150	-
					13C-PCB-208	106	25 - 150	
					13C-PCB-209	89.4	25 - 150	•
				PS	13C-PCB-79	103	30 - 135	
					13C-PCB-178	115	30 - 135	-
		•_		a. Rei	porting limit.		<u>-</u>	
-		-	• *		wer control limit - upper control la	mit.	-	

			•	
Analyst: DMS	Page 2 of 2	Approved By:	Calvin Tanaka 15-Aug-2012 1	4:56

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Sample ID: D	31308					EPA I	Method 160
	eston Solutions, Inc. -03-0002 24-Jul-12	<u>Sample</u> Matrix Sampl		Laboratory Data Lab Sample: 33913-003 QC Batch No.: 4585 Date Analyzed DB-1: 10-Aug-12		Date Received: Date Extracted:	
Time Collected: Analyte	Conc. (pg/m3)	RL a	Qualifiers	Labeled Standard	%R	LCL-UCL	b Qualifiers
Total monoCB	113	10.2		<u>IS</u> 13C-PCB-1	63.7	25 - 150	
Total diCB	2910	20.4	В	13C-PCB-3	65.0	25 - 150	
Total triCB	12300	10.2		13C-PCB-4	83.0	25 - 150	
Total tetraCB	10600	10.2		13C-PCB-11	86.4	25 - 150	-
Total pentaCB	- 6180	10.2		13C-PCB-9	81.6	25 - 150	
Total hexaCB	2220	10.2	_	13C-PCB-19	72.1	25 - 150	
Total heptaCB	347	10.2	J- 1.	13C-PCB-28	85.3	25 - 150	
Total octaCB	41.1	10.2		13C-PCB-32	75.1	25 - 150	
Total nonaCB	ND	10.2		13C-PCB-37	97.0	25 - 150	
Fotal decaCB	ND	10.2		13C-PCB-47	81.0	25 - 150	
Total PCB	34800	20.4	В	13C-PCB-52	80.9	25 - 150	
				13C-PCB-54	69.5	25 - 150	
				13C-PCB-70	95.1	25 - 150	<u></u> .
	_			13C-PCB-77	92.8	25 - 150	
			÷.	13C-PCB-80	96.3	25 - 150	
		· 3 i=		13C-PCB-81	94.7	25 - 150	
-	**	' 3 1-		13C-PCB-95	91.2	25 ÷ 150	-
_				13C-PCB-97	97.9	25 - 150	
	•			13C-PCB-101	99.6	25 - 150	
			,	13C-PCB-104	81.2	25 - 150	
	-	••	, ·	13C-PCB-105	97.5	25 - 150	1
				13C-PCB-114	103	25 - 150	
		_	ă Z	13C-PCB-118	93.1	25 - 150	
5				13C-PCB-123	96.4	25 - 150	a =c
ć.,,	- وهمستفسين		Sec. rec.	13C-PCB-126	89.2	25 - 150	4 - -
				13C-PCB-127	102	25 - 150	
				13C-PCB-138	98.9	25 - 150	

Sample ID: D313	Sample ID: D31308						EPA N	Tethod 1668A
Project: 12-03-4 Date Collected: 24	n Solutions, Inc. 0002 I-Jul-12	Sample Da Matrix: Sample Si	rta PUF ze: 4.913 m3	Lab S QC B	ample: 33913-003 atch No.: 4585 Analyzed DB-1: 10-Aug-1	2	Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
	-		- 4	Pe	13C-PCB-141 13C-PCB-153 13C-PCB-155 13C-PCB-156 13C-PCB-157 13C-PCB-159 13C-PCB-167 13C-PCB-169 13C-PCB-180 13C-PCB-188 13C-PCB-188 13C-PCB-189 13C-PCB-194 13C-PCB-202 13C-PCB-206 13C-PCB-208 13C-PCB-209 13C-PCB-209	106 107 101 90.5 88.5 99.3 96.8 100 108 87.8 98.9 119 92.8 90.7 99.8 93.1 91.6	25 - 150 25 - 150 28 - 150 29 - 150 20 - 150 20 - 150 21 - 150 22 - 150 25 - 150 25 - 150	
-		-		1 '	13C-PCB-79 13C-PCB-178 porting limit wer control limit - upper control li	103 116 ımit	30 - 135 30 - 135	

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Analyst:	MAS	Page	2 of 2 Ap	oproved By: Ca	alvin Tanaka 🛾 l	5-Aug-2012 14:56	ĺ

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Sample ID: D3136	U7 					Era I	Method 1668
Client Data	Solutions, Inc.	Sample D		Laboratory Data		Date Received:	27 1.4 12
Name: Weston Project: 12-03-0		Matrix:	PUF	Lab Sample: 33913-004			
·	Jul-12	Sample S	ize: 4.890 m3	QC Batch No.: 4585	_	Date Extracted:	4-Aug-12
Time Collected: 121				Date Analyzed DB-1: 10-Aug-1	2		
Analyte	Conc. (pg/m3)	a RL	Qualifiers	Labeled Standard	%R	LCL-UCL	b Qualifiers
Total monoCB	253	10.2		IS 13C-PCB-1	59.3	25 - 150	,1
Total diCB	6280	20.4	В	13C-PCB-3	66.4	25 - 150	
Total triCB	23500	10.2		13C-PCB-4	80.2	25 - 150	
Total tetraCB	16300	10.2		13C-PCB-11	90.1	25 - 150	
Total pentaCB	7330	10;2		13C-PCB-9	82.7	25 - 150	
Total hexaCB	1780	10.2	-	13C-PCB-19	74.2	25 - 150	
Total heptaCB	177	10.2) ~ · · · · · · · · · · · · · · · · · ·	13C-PCB-28	91.4	25 - 150	_
Total octaCB	ND	10.2		13C-PCB-32	78.7	25 - 150	
Total nonaCB	ND	10.2		13C-PCB-37	103	25 - 150	•
Total decaCB	ND	10.2		13C-PCB-47	78.9	25 - 150	
Total PCB	55600	20.4	В	13C-PCB-52	77.0	25 - 150	
•			-	13C-PCB-54	63.5	25 - 150	
4	4 90	,		13C-PCB-70	93.2	25 - 150	•
,				13C-PCB-77	85.1	25 - 150	
		-		13C-PCB-80	92.2	25 - 150	
				13C-PCB-81	88.6	25 - 150	
•		-		13C-PCB-95	91.9	<u>25</u> - 150	
				13C-PCB-97	95.6	25 - 150	
M X 7 7 71 THEFT		Andrew September 1	* * ***	13C-PCB-101	97.9	25 - 150	to the second to
		A 160		13C-PCB-104	82.3	25 - 150	
-		•	* -	13C-PCB-105	86.8	25 - 150	<u>.</u> -
				13C-PCB-114	89.5	25 - 150	-
				13C-PCB-118	85.9	25 - 150	
			•	13C-PCB-123	90.3	25 - 150	
** *	· •1	• • · · ·	-	13C-PCB-126	75.7	25 - 150	
	·		·	13C-PCB-127	89.8	25 - 150	
	-			13C-PCB-138	82.1	25 - 150	

Sample ID: D3130	Sample ID: D31309						EPA N	Method 1668A
Project: 12-03-00	ul-12	Sample I Matrix: Sample	PUF Size: 4.890 m3	Lab S QC B	bratory Data Sample: 33913-004 atch No.: 4585 Analyzed DB-1: 10-Aug-12	2	Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers		Labeled Standard	%R	LCL-UCL	b Qualifiers
				<u>PS</u>	13C-PCB-141 13C-PCB-153 13C-PCB-155 13C-PCB-156 13C-PCB-157 13C-PCB-159 13C-PCB-167 13C-PCB-169 13C-PCB-170 13C-PCB-180 13C-PCB-180 13C-PCB-180 13C-PCB-180 13C-PCB-189 13C-PCB-189 13C-PCB-194 13C-PCB-202 13C-PCB-206 13C-PCB-206 13C-PCB-207 13C-PCB-209 13C-PCB-79 13C-PCB-178	90.5 92.6 98.6 102 101 92.0 98.5 108 107 98.5 87.8 97.2 89.5 93.5 88.7 85.6 83.1 105 88.5	25 - 150 25 - 150	
				1 -	porting limit, wer control limit - upper control li			

Analyst:	MAS	Page 2 of 2	Approved By:	Calvin Tanaka	15-Aug-2012 14:56	

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Sample ID: D31310)					EPA N	Lethod 1668
Client Data Name: Weston S Project: 12-03-000 Date Collected: 24-Ju Time Collected: 1220	ıl-12	Sample I Matrix: Sample	PUF Size: 4.896 m3	Laboratory Data Lab Sample: 33913-005 QC Batch No.: 4585 Date Analyzed DB-1: 6-Aug-	12	Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
Total monoCB	- 145	10.2		<u>IS</u> 13C-PCB-1	37.7	25 - 150	-
Total diCB	4570	20.4	В	13C-PCB-3	42.7	25 - 150	
Total triCB	19500	10.2	,	13C-PCB-4	71.0	25 - 150	
Total tetraCB	13400 _	10.2	_	13C-PCB-11	80.4	25 - 150	
Total pentaCB	10500	10.2	-	L3C-PCB-9	72.4	25 - 150	
Total hexaCB	4150	10.2	3 nd 1 het 2n3 hole 1	13C-PCB-19	40.9	25 - 150	
Total heptaCB	607	10.2		13C-PCB-28	78.6	25 - 150	
Total octaCB	50.7	10.2		13C-PCB-32	44. <u>7</u>	25 - 150	
Total nonaCB	ND	10.2	_ ı	13C-PCB-37	98.I	25 - 150	
Total decaCB	ND	10.2		13C-PCB-47	78.6	25 - 150	
Total PCB	52900	20.4	В	13C-PCB-52	75.7	25 - 150	
1 1	wi i	American () ()	indus.co	13C-PCB-54	61.8		1 1-1
	·		·	13C-PCB-70	92.0	25 - 150	
1	_	_		13C-PCB-77	88.5	25 - 150	
			-i i ****:-	13C-PCB-80	85.7	25 - 150	u.L
		-		13C-PCB-81	88.8	25 - 150	
-	~			13C-PCB-95	83.0	25 - 150	
-			<u> </u>	13C-PCB-97	93.4	25 - 150	-
			ण्ह्	13C-PCB-101	91.8	25 - 150	*** >
				13C-PCB-104	71.7	25 - 150	
				13C-PCB-105	67.8	25 - 150	
			•	13C-PCB-114	76.5	25 - 150	
			-	13C-PCB-118	92.1	25 - 150	
				13C-PCB-123	97.3	25 - 150	_
				13C-PCB-126	64.2	25 - 150	
			-	13C-PCB-127	71.0	25 - 150	-
4	•			13C-PCB-138	95.I	25 - 150	

ik Te

Sample ID: D31310					EPA M	lethod 1668A
Client Data	Sample Data		oratory Data		Date Received:	27 1-1 12
Very Very Very Very Very Very Very Very	Matrix: PUF		Sample: 33913-005			1
Pate Collected: 24-Jul-12	Sample Size: 4.896 m3	T	eatch No.: 4585		Date Extracted: 4	1-Aug-12
Fime Collected: 1220		Date .	Analyzed DB-1: 6-Aug-12			
inic conceed. 1220		+			- ъ	
analyte Conc. (pg/m3)	RL Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
_	,		13C-PCB-141	95.4	25 - 150	
	_	1	13C-PCB-153	95.2	25 - <u>1</u> 50	
			13C-PCB-155	86.9	25 - 150	
· .			13C-PCB-156	92.7	25 - 150	
			13C-PCB-157	94.9	25 - 150	
	*		13C-PCB-159	92.4	25 - 150	
			13C-PCB-167	91.6	25 - 150	
			13C-PCB-169	81.2	25 - 150	
-			13C-PCB-170	95.3	25 - 150	
1.			13C-PCB-180	88.2	25 - 150	
_			13C-PCB-188	91.3	25 - 150	
			13C-PCB-189	83.1	25 - 150	
			13C-PCB-194	92.3	25 - 150	
•	-		13C-PCB-202	96.6	25 - 150	-
	~		13C-PCB-206	103	25 - 150	
			13C-PCB-208	103	25 - 150	
		-	13C-PCB-209	91.9	25 - 150	
		PS	13C-PCB-79	102	30 - 135	
			13C-PCB-178	111	30 - 135	
-		a Res	porting limit.		20 - 122	į
-	-	1 -	wer control limit - upper control lim	i t	-	~

Analyst: ANP	Page 2 of 2	Approved By:	William J. Luksemburg 15-Aug-2012 15:1

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Sample ID: D3131	11					EPA N	1ethod 166
Client Data		Sample Da		Laboratory Data			
	Solutions, Inc.	Matrix:	PUF	Lab Sample: 33913-006		Date Received:	27-Jul-12
Project: 12-03-00		Sample S	ize: 5.0 m3	QC Batch No.: 4585		Date Extracted:	4-Aug-12
	Jul-12			Date Analyzed DB-1: 7-Aug-12			_
ime Collected: 122	5			, , ,			
analyte	Conc. (pg/m3)	$\mathbf{RL}^{\mathbf{a}}$	Qualifiers	Labeled Standard	%R	LCL-UCL	Oualifiers
otal monoCB	ND	10.0		<u>IS</u> 13C-PCB-1	37.8	25 - 150	سد
otal diCB	ND	20.0		13C-PCB-3	45.8	25 - 150	
otal triCB	ND	10.0		13C-PCB-4	60.7	25 - 150	
otal tetraCB	ND	10.0		13C-PCB-11	74.6	25 - 150	_
otal pentaCB	ŅD	10.0	•	13C-PCB-9	63.5	25 - 150	
otal hexaCB	ND	10.0		13C-PCB-19	53.1	25 - 150	
otal heptaCB	[*] ND	10.0		13C-PCB-28	83.0	25 - 150	
otal octaCB	ND	10.0		13C-PCB-32	55.9	25 - 150	
otal nonaCB	ND	10.0		13C-PCB-37	82.2	25 - 150	-
otal decaCB	ND	10.0		13C-PCB-47	75.6	25 - 150	
otal PCB	ND	20.0	* ***	13C-PCB-52	76.6	25 - 150	,
•				13C-PCB-54	68.7	25 - 150	
				13C-PCB-70	86.3	25 - 150	
				13C-PCB-77	83.1	25 - 150	
				13C-PCB-80	86.1	25 - 150	
_				13C-PCB-81	85.7	25 - 150	
				13C-PCB-95	87.3	25 - 150	
				13C-PCB-97	91.2	25 - 150	
	- 11		35. 7	13C-PCB-101	88.1	25 - 150	·
				13C-PCB-104	79.6	25 - 150	
•				13C-PCB-105	83.0	25 - 150	
				13C-PCB-114	84.6	25 - 150	
				13C-PCB-118	85.7	25 - 150	
				13C-PCB-123	90.7	25 - 150	•
			,	13C-PCB-126	79.1	25 - 150	
				13C-PCB-127	85.4	25 - 150	
				13C-PCB-138	88.8	25 - 150	= ,

Sample ID: D313	311						EPA I	Method 1668A
Project: 12-03- Date Collected: 24	n Solutions, Inc. -0002 4-Jul-12 225	Sample Da Matrix: Sample Si	PUF	Lab S QC B	ample: 33913-006 atch No.: 4585 Analyzed DB-1: 7-Aug-1	2	Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers		Labeled Standard	%R	LCL-UCL	o Oualifiers
	·-				13C-PCB-141	92.2	25 - 150	
				1	13C-PCB-153	91.9	25 150	
				}	13C-PCB-155	109	25 - 150	
					13C-PCB-156	84.6	25 - 150	
					13C-PCB-157	88.1	25 - 150	
**************************************	•	•			13C-PCB-159	86.5	25 - 150	
V		·-			13C-PCB-167	84.1	25 - 150	
				- -	13C-PCB-169	92.4	25 - 150	
	-	_			13C-PCB-170	106	25 - 150	
1t .					13C-PCB-180	100	25 - 150	
	-				13C-PCB-188	87.3	25 - 150	
•					13C-PCB-189	106	25 - 150	* -
					13C-PCB-194	79.0	25 - 150	
	•				13C-PCB-202	104	25 - 150	
		-			13C-PCB-206	83.9	25 - 150	
	-				13C-PCB-208	74.9	25 - 150	
,		•	· •		13C-PCB-209	80.8	25 - 150	- •
		-		PS.	13C-PCB-79	101	30 - 135	
-	-				13C-PCB-178	95.0	30 - 135	
÷				a Rep	orting limit.			
				b Lov	ver control limit - upper control	limit		

Analyst:	ANP	Page 2 of 2 Appro	oved By: Calvin Tanaka 15-Aug-2012 14:56	

Sample ID: D31312	2					EPA I	Method 1668
Client Data Name: Weston Solutions, Inc. Project: 12-03-0002 Date Collected: 25-Jul-12 Time Collected: 1230		Sample Data Matrix: Sample Size	PUF	Laboratory Data Lab Sample: 33913-007 QC Batch No.: 4585 Date Analyzed DB-1: 7-Aug-12		Date Received: 27-Jul-12 Date Extracted: 4-Aug-12	
Analyte	Conc. (pg/m3)	a RL	Qualifiers	Labeled Standard	%R	LCL-UCL	b Qualifiers
Total monoCB	ND	10.0	· · · · · · · · · · · · · · · · · · ·	IS 13C-PCB-1	53.6	25 - 150	
Total diCB	25.5	20.0	В	13C-PCB-3	60.2	25 - 150	
Total triCB	ND	10.0		13C-PCB-4	81.3	25 - 150	
Total tetraCB	ND	10.0		13C-PCB-11	84.6	25 - 150	
Total pentaCB	ND	10.0		13C-PCB-9	82.0	25 - 150	•
Total hexaCB	ND	10.0		13C-PCB-19	59.4	25 - 150	
Total heptaCB	ND	10.0		13C-PCB-28	80.2	25 - 150	=
Total octaCB	ND	10.0		13C-PCB-32	61.1	25 - 150	
Total nonaCB	ND	10.0	_	13C-PCB-37	92.0	25 - 150	_
Total decaCB	ND	10.0		13C-PCB-47	80.5	25 150	
Total PCB	25.5	20.0	B	13C-PCB-52	81.6	25 <u>-</u> 150	
				13C-PCB-54	74.1	25 - 150	
				13C-PCB-70	90.6	25 - 150	
				13C-PCB-77	86.6	25 - 150	
			_	13C-PCB-80	93.1	25 - 150	
_				13C-PCB-81	88.1	25 - 150	
· · · · · · · · · · · · · · · · · · ·	* ***	** "L	,	13C-PCB-95	88.7	25 - 150	,
_				13C-PCB-97	97.9	25 - 150	
		·····		13C-PCB-101	97.5	25 - 150	·
				13C-PCB-104	81.6	25 - 150	
,				13C-PCB-105	83.7	25 - 150	•
				13C-PCB-114	87.6	25 - 150	
			**	13C-PCB-118	- 92.4	25 - 150	
				13C-PCB-123	99.0	25 - 150	
				13C-PCB-126	82.5	25 - 150	
				13C-PCB-127	86.9	25 - 150	
				13C-PCB-138	91.2	25 - 150	-

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Sample ID: D31312			EPA Method 1668A					
Project: 12-03-0	Jul-12	Sample Da Matrix: Sample Si:	ta PUF ze: 5.0 m3	Lab S QC B	ample: 33913-007 atch No.: 4585 Analyzed DB-1: 7-Aug-12		Date Received: Date Extracted:	
Analyte	Conc. (pg/m3)	RL a	Qualifiers		Labeled Standard	%R	LCL-UCL	Qualifiers
		- -			13C-PCB-141 13C-PCB-153 13C-PCB-155 13C-PCB-156 13C-PCB-157 13C-PCB-159 13C-PCB-167 13C-PCB-169 13C-PCB-180 13C-PCB-180 13C-PCB-188 13C-PCB-189 13C-PCB-194 13C-PCB-194 13C-PCB-206 13C-PCB-206 13C-PCB-206	94.5 92.0 114 92.0 93.9 91.9 91.3 105 114 110 87.7 118 94.8 102 81.9 90.9	25 - 150 25 - 150	
;		~ ~ ~ ~ = ~ ~		1	13C-PCB-79 13C-PCB-178 porting limit. wer control limit - upper control l	76.2 64.2	30 - 135 30 - 135	

1					•	
Analyst: A	ANP	Page 2 of 2	Approved By:	Calvin Tanaka	15-Aug-2012 14:56	

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DATA QUALIFIERS & ABBREVIATIONS

B This compound was also detected in the method blank.

D Dilution

E The amount detected is above the High Calibration Limit.

P The amount reported is the maximum possible concentration due to possible

chlorinated diphenylether interference.

H Recovery was outside laboratory acceptance limits.

I Chemical Interference

J The amount detected is below the Low Calibration Limit.

* See Cover Letter

Conc. Concentration

DL Sample-specific estimated detection limit

MDL The minimum concentration of a substance that can be measured and

reported with 99% confidence that the analyte concentration is greater

than zero in the matrix tested.

EMPC Estimated Maximum Possible Concentration

NA Not applicable

RL Reporting Limit – concentrations that correspond to low calibration point

ND Not Detected

TEQ Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

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U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 1

OFFICE OF ENVIRONMENTAL MEASUREMENT & EVALUATION NORTH CHELMSFORD, MASSACHUSETTS 01863-2431

MEMORANDUM

DATE:

August 21, 2012

SUBJECT:

Park Street, Bennington, VT - PCB Field Analytical Results

FROM:

Scott Clifford, Chemist 10 8/22/12

TO:

Cathy Young, OSC

THRU:

Dan Boudreau, Chemistry Team Leader

8/22/12

PROJECT NUMBER:

12080032

DATE OF ANALYSIS:

08/07/12 - 08/09/12

ANALYTICAL PROCEDURE:

Soils were analyzed for PCBs using EPA Region I SOP for PCBs Field Testing for Soils and Sediment samples (EIA-FLDPCB2.SOP). Approximately 1 gram of sample was weighed into a 4 ml vial. To this was added 200 $\,\mu\text{L}$ water, 800 $\,\mu\text{L}$ methanol and 1000 $\,\mu\text{L}$ hexane. The sample mix was vortexed for approximately one minute and then centrifuged. A portion of the hexane extract was analyzed on a Shimadzu gas chromatograph equipped with an electron-capture detector and 30 meter, 0.53mm ID MXT-5 or equivalent column. Concentrations of PCBs in soil were calculated using the external standard technique.

TARGET COMPOUNDS:

PCB A1242

PROJECT NOTE: PCB reported as A1242 looked weathered, and could be PCB A1016 or PCB A1232

Discussion:

Analysis on the Shimadzu Model GC 14A is used for tentative identification and semiquantitation of PCBs in soil, oil and sediment samples. This field technique is not meant to substitute for the CLP PCBs in soil protocol. This analysis technique can, however save costly analysis time when full protocol is not required.

File: K:\CHEMISTRY\REPORTS\FIELD\12080032fdpcb.xls

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Decultor	
Results:	
	<u> </u>
Results are in columns below. ND() is no	t detected with the reporting level in
parenthesis. Soil PCB results are based or	n sample wet weight.
	The state of the s
David Odres d. Davidson VIII	DOD FILLS 1 (1 LD 1)
Park Street, Bennington, VT -	
08/07/12	-08/09/12
	PCB Aroclor Results
	Wet Weight
	ppm
Sample #	Aroclor
Sample #	1242
SD-506	ND(0.2)
SD-501	ND(0.2)
SD-507	ND(0.2)
SD-507 Lab Dup	ND(0.2)
SD-504	ND(0.2)
SD-503	ND(0.2)
SD-502	ND(0.2)
SD-511	ND(0.2)
SD-514	ND(0.2)
E-300	ND(0.2)
E-200	ND(0.2)
SD-505	ND(0.2)
SD-512	ND(0.2)
B-300	ND(0.2)
B-200	ND(0.2)
SD-513	0.3
B-400	ND(0.2)
E-100	ND(0.3)
SD-516	ND(0.5)
SD-515	ND(0.2)
E-000	ND(0.2)
SD-522	ND(0.2)
SD-521	ND(0.2)
SD-526	ND(0.2)
SD-526 Lab Dup	ND(0.2)
1-300	ND(0.2)
SD-524	ND(0.2)
SD-525	ND(0.2)
H-200	ND(0.2)
H-300	ND(0.2)
I-100	ND(0.2)
H-000	ND(0.2)
1-200	ND(0.2)
H-100	ND(0.2)
K-300	ND(0.2)
1-000	ND(0.2)
J-100	ND(0.2)
J-000	ND(0.2)
J-300	ND(0.2)
J-200	ND(0.2)
SD-523	1.0
L-300	
	ND(0.2)
L-400 . 1940 Th	ND(0.2)

Results are in columns below. ND() is not detected with the reporting level in parenthesis. Soil PCB results are based on sample wet weight. Park Street, Bennington, VT - PCB Field Analytical Results 08/07/12 -08/09/12 **PCB Aroclor Results** Wet Weight ppm Aroclor Sample # 1242 K-100 ND(0.2) K-200 ND(0.2) K-200 Lab Dup ND(0.2) K-400 0.3 F-250 0.3 SD-548 ND(0.2) SD-547 ND(0.2) SD-546 ND(0.2) SD-545 ND(0.2) SD-549 ND(0.2) SD-549 Lab Dup ND(0.2) P410 SD- 551 ND(0.2) P410 SD- 552 ND(0.2) P410 SS-01 ND(0.5) P410 SS-02 ND(0.5) P410 SS-03 ND(0.5) P414-SB-05 ND(0.2) P414-SB-06 ND(0.2) P414-SB-10 ND(0.5) P414-SB-09 ND(15) P414-SB-11 ND(0.2) P414-SB-12 ND(0.2) P414-SB-12 Lab Dup ND(0.2) P414-SB-07 ND(0.5) P414-SB-03 ND(0.2) P414-SB-01 ND(0.2) P414-SB-02 ND(0.3) P414-SB-08 ND(0.2) P414-SB-04 ND(0.2) P538 SB-09 ND(0.2) P538 SB-06 ND(0.2) P538 SB-05 ND(0.2)P538 SB-07 ND(0.2) P538 SB-08 ND(0.2) P538 SB-04 ND(0.2) P538 SB-10 ND(0.2) P594 SB-03 ND(0.2) P594 SB-02 ND(0.2) P594 SB-01 ND(0.2) P594 SB-07 ND(0.2) P594 SB-04 ND(0.2) P594 SB-08 ND(0.2) P538 SB-14 ND(0.2)P538 SB-15 ND(0.2) P538 SB-13 ND(0.2)

Projet 1

	
Park Street, Benningt	on, VT - PCB Field Analytical Results
	08/07/12 -08/09/12
	PCB Aroclor Results
	Wet Weight
*	ppm
	Aroclor
Sample #	1242
94 SB-05	ND(0.2)
38 SB-02	ND(0.2)
38 SB-01	ND(0.5)
94 SB-06	ND(0.2)
38 SB-12	ND(0.2)
38 SB-11	ND(0.2)
38 SB-03	ND(0.2)
94 SB-11	ND(0.2)
94 SB-14	ND(0.2)
94 SB-16	ND(0.2)
94 SB-09	ND(0.2)
94 SB-15	ND(0.2)
94 SB-13	ND(0.2)
94 SB-10	ND(0.2)
94 SB-12	ND(0.5)
94 SB-17	ND(0.3)
94 SB-22	ND(0.2)
94 SB-23	ND(0.2)
04 SB-20	ND(0.3)
94 SB-21	ND(0.3)
4 SB-18	
4 SB-19	ND(0.2)
4 SB-29	ND(0.2)
4 SB-27	ND(0.3)
4 SB-25	ND(0.2)
4 SB-24	ND(0.5)
4 SB-26	ND(0.2)
4 SB-28	ND(0.2)
4 SB-28 Lab Dup	ND(0.2)
4 SB-30	ND(0.2)
T 0D-00	ND(0.2)
•	
·	





United States Environmental Protection Agency Office of Environmental Measurement & Evaluation 11 Technology Drive North Chelmsford, MA 01863-2431

Laboratory Report

August 29, 2012

Cathy Young - Mail Code OSRR02-2 US EPA New England R1

Project Number: 12080031

Project: Park Street - Bennington, VT Analysis: PCBs in Water Low Level

Analyst: Paul Carroll

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-PESWALL6.

The SOP is based on "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, Method 608 - Organochlorine Pesticides and PCBS".

The analysis was carried out using high resolution capillary column chromatography. The 30 meter dual capillary system consists of J&W DB-5 and J&W DB-1701 columns both with a 0.25 mm ID.

Date Samples Received by the Laboratory: 08/10/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

177227774 11374 11397

If you have any questions please call me at 617-918-8340.

Sincerely,

ou=EIA.

Digitally signed by Dan Boudreau DN: cn=Dan Boudreau, o=EPA,

email=boudreau.dan@epa.gov, c=US

Date: 2012.08.29 14:40:14 -04'00'

HRS Reference #88 ©00077€.1.a Page 77 of 165

12080031\$PCBW

Qualifiers:

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

- B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
- C =The identification has been confirmed by GC/MS.
- R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

12080031\$PCBW

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY0-0210	Lab Sample ID:	AB31783
Date of Collection:	8/9/2012	Matrix	Water
Date of Extraction:	8/10/12	Final Volume:	5 mL
Date of Analysis:	8/14/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	i
Wet Weight Extracted:	N/A	pH:	5.7
Volume Extracted:	1000 mL	GPC Factor:	N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	69	40 - 106
Decachlorobiphenyl	76	27 - 128

Park Street - Bennington, VT Blank for PCBs Water

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Water
Date of Extraction:	8/10/12	Final Volume:	5 mL
Date of Analysis:	8/14/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	5.8
Volume Extracted:	1000 mL	GPC Factor:	N/A

		Concentration	\mathbf{RL}	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	· ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	60	40 - 106
Decachlorobiphenyl	97	27 - 128

MATRIX SPIKE (MS)

Park Street - Bennington, VT Sample ID: AB31783

PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
Aroclor-1016	3	ND	3.32	111	70 - 130
Aroclor-1260	3	ND	3.37	112	70 - 130
Comments:					

12080031\$PCBW

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HRS Reference #88

Page 1 of 2

Samplers Signatures

CHAIN OF CUSTODY RECORD

Project Code: Park Street Contact Name: Cathy Young

Contact Phone: 617-918-1217

No: 1-080912-105002-0004

DateShipped: 8/9/2012

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSC
	R01-120403CY-0107	SD-513	C200	PCBs	Sediment	8/7/2012	10:30	1	8 oz Amber	
	R01-120403CY-0110	SD-516	D200	PCBs	Sediment	8/7/2012	10:42	1	8 oz Amber	
	R01-120403CY-0113	SD-519	E200	PCBs	Sediment	8/7/2012	10:00	1	8 oz Amber	+
	R01-120403CY-0117	SD-523	F200	PCBs	Sediment	8/7/2012	12:30	1	8 oz Amber	
	R01-120403CY-0136	SD-542	K400	PCBs	Sediment	8/7/2012	14:50	1	8 oz Amber	<u> </u>
	R01-120403CY-0139	SD-545	M300	PCBs	Sediment	8/8/2012	08:00	1	8 oz Amber	
	R01-120403CY-0144	SD-550	F250	PCBs	Sediment	8/8/2012	08:15	2	8 oz Amber	Y
	R01-120403CY-0147	P-410-SS-01	Near tank	PCBs	Soil	8/8/2012	10:21	1	4 oz Amber	
	R01-120403CY-0148	P-410-SS-02	Wall near tank	PCBs	Soil	8/8/2012	10:26	1	4 oz Amber	
	R01-120403CY-0149	P-410-SS-03	Wall near weil	PCBs	Soil	8/8/2012	10:30	1	4 oz Amber	-
	R01-120403CY-0151	P-414-SB-02		PCBs	Soil	8/8/2012	12:00	1	4 oz Amber	
	R01-120403CY-0156	P-414-SB-07		PCBs	Soil	8/8/2012	12:00	1	4 oz Amber	
	R01-120403CY-0158	P-414-SB-09		PCBs	Soil	8/8/2012	11:15		4 oz Amber	
	R01-120403CY-0159	P-414-SB-10		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0162	P-538-SB-01	A100	PCBs	Soil	8/8/2012	14:40	1	4 oz Amber	
	R01-120403CY-0175	P-538-SB-14	D000	PCBs	Soil	8/8/2012	14:05	2	4 oz Amber	Y
	R01-120403CY-0185	SD-600	E200	PCBs	Sediment	8/7/2012	10:00		8 oz Amber	
	R01-120403CY-0186	P-414-SB-100		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0190	P-594-SB-12	C150	PCBs	Soil	8/9/2012	09:10	1	4 oz Amber	

	SAMPLES TRANSFERRED FROM
Special Instructions:	CHAIN OF CUSTODY #
	<u> </u>

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date,	Time
	May	8/9/12	Quat CUII	8-9-12	1250%	3	Lot (14	81012		78	11:12
	011	//						/	11	16	_
											-

Project Code: Park Street Contact Name: Cathy Young Contact Phone: 617-918-1217

DateShipped: 8/9/2012

Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time			MS/MSD
R01-120403CY-0195	P-594-SB-17	E000	PCBs	Soil	8/9/2012	09:30	1	4 oz Amber	
R01-120403CY-0198	P-594-SB-20	E150	PCBs	Soil	8/9/2012	10:20	1		
R01-120403CY-0209	TT2814		PCBs	Soil			1		-
R01-120403CY-0210	RB-01	auger head	PCBs	Filtered Water	8/9/2012	11:30	2	1 liter amber	
									
									
		- 		-					
									-
		_							
			-	<u> </u>		 		· <u> </u>	
					,				
	 			<u></u>					
	R01-120403CY-0195 R01-120403CY-0198 R01-120403CY-0209	R01-120403CY-0195 P-594-SB-17 R01-120403CY-0198 P-594-SB-20 R01-120403CY-0209 TT2814	R01-120403CY-0195 P-594-SB-17 E000 R01-120403CY-0198 P-594-SB-20 E150 R01-120403CY-0209 TT2814	R01-120403CY-0195 P-594-SB-17 E000 PCBs R01-120403CY-0198 P-594-SB-20 E150 PCBs R01-120403CY-0209 TT2814 PCBs	R01-120403CY-0195 P-594-SB-17 E000 PCBs Soil R01-120403CY-0198 P-594-SB-20 E150 PCBs Soil R01-120403CY-0209 TT2814 PCBs Soil	R01-120403CY-0195 P-594-SB-17 E000 PCBs Soil 8/9/2012 R01-120403CY-0198 P-594-SB-20 E150 PCBs Soil 8/9/2012 R01-120403CY-0209 TT2814 PCBs Soil 8/9/2012	R01-120403CY-0195 P-594-SB-17 E000 PCBs Soil 8/9/2012 09:30 R01-120403CY-0198 P-594-SB-20 E150 PCBs Soil 8/9/2012 10:20 R01-120403CY-0209 TT2814 PCBs Soil 8/9/2012 11:00	R01-120403CY-0195 P-594-SB-17 E000 PCBs Soil 8/9/2012 09:30 1 R01-120403CY-0198 P-594-SB-20 E150 PCBs Soil 8/9/2012 10:20 1 R01-120403CY-0209 TT2814 PCBs Soil 8/9/2012 11:00 1	R01-120403CY-0195 P-594-SB-17 E000 PCBs Soil 8/9/2012 09:30 1 4 oz Amber R01-120403CY-0198 P-594-SB-20 E150 PCBs Soil 8/9/2012 10:20 1 4 oz Amber R01-120403CY-0209 TT2814 PCBs Soil 8/9/2012 11:00 1 2 oz Amber

	SAMPLES TRANSFERRED FROM
Special Instructions:	CHAIN OF CUSTODY#
	<u> </u>

Items/Reason	Relinquistled by	Date	Received by	Date -	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	flog	8/4/2	Putt CMI	8-9-12	12:50 %		Dutt Uff	8-10-12	Anis	8/3/12	11.20
			(1)				((/		1	10	
										 	-
											1





United States Environmental Protection Agency Office of Environmental Measurement & Evaluation 11 Technology Drive North Chelmsford, MA 01863-2431

Laboratory Report

October 25, 2012

Dan Burgo - Mail Code OSRR02-2 US EPA New England R1

Project Number: 12090046

Project: Park Street - Bennington, VT Analysis: PCBs in Water Low Level

Analyst: Paul Carroll

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-PESWALL6.

The SOP is based on "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, Method 608 - Organochlorine Pesticides and PCBS".

The analysis was carried out using high resolution capillary column chromatography. The 30 meter dual capillary system consists of J&W DB-5 and J&W DB-1701 columns both with a 0.25 mm ID.

Date Samples Received by the Laboratory: 09/28/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340.

Sincerely,

Digitally signed by Dan Boudreau DN: cn=Dan Boudreau, o=EPA,

ou=EIA,

email=boudreau.dan@epa.gov,

1**7**7.158.832

12090046\$PCBW

c=US

Date: 2012.10.25 09:34:21 -04'00'

HRS Reference #88

Qualifiers: RL = Reporting limit

- ND = Not Detected above Reporting limit
- NA = Not Applicable due to high sample dilutions or sample interferences
- J = Estimated value
- E = Estimated value exceeds the calibration range
- L = Estimated value is below the calibration range
- B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
- C =The identification has been confirmed by GC/MS.
- R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

12090046\$PCBW

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Park Street - Bennington, VT

PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0213	Lab Sample ID:	AB33527
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	l
Wet Weight Extracted:	N/A	pH:	6.0
Volume Extracted:	1060 mL	GPC Factor:	N/A

		Concentration	RL	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.45	
11104-28-2	Aroclor-1221	ND	0.45	
11141-16-5	Aroclor-1232	ND	0.45	
53469-21-9	Aroclor-1242	ND	0.45	
12672-29-6	Aroclor-1248	ND	0.45	
11097-69-1	Aroclor-1254	ND	0.45	
11096-82-5	Aroclor-1260	ND	0.45	
11100-14-4	Aroclor-1262	ND	0.45	
37324-23-5	Aroclor-1268	ND	0.45	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	62	40 - 106
Decachlorobiphenyl	91	27 - 128

Comments:

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Section of the contract of the

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0214	Lab Sample ID:	AB33528
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.0
Volume Extracted:	890 mL	GPC Factor:	N/A

		Concentration	\mathbf{RL}	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.55	
11104-28-2	Aroclor-1221	ND	0.55	
11141-16-5	Aroclor-1232	ND	0.55	
53469-21-9	Aroclor-1242	ND	0.55	
12672-29-6	Aroclor-1248	ND	0.55	
11097-69-1	Aroclor-1254	ND	0.55	
11096-82-5	Aroclor-1260	ND	0.55	
11100-14-4	Aroclor-1262	ND	0.55	
37324-23-5	Aroclor-1268	ND	0.55	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	60	40 - 106
Decachlorobiphenyl	80	27 - 128

Comments:

12090046\$PCBW

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Park Street - Bennington, VT

PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0215	Lab Sample ID:	AB33529
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.0
Volume Extracted:	1020 mL	GPC Factor:	N/A

	Concentration	\mathbf{RL}	
Compound	ug/L	ug/L	<u>Qualifier</u>
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	0.50	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND ·	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	
Aroclor-1262	ND	0.50	
Aroclor-1268	ND	0.50	
	Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-1262	Compound ug/L Aroclor-1016 ND Aroclor-1221 ND Aroclor-1232 ND Aroclor-1242 ND Aroclor-1248 ND Aroclor-1254 ND Aroclor-1260 ND Aroclor-1262 ND	Compound ug/L ug/L Aroclor-1016 ND 0.50 Aroclor-1221 ND 0.50 Aroclor-1232 ND 0.50 Aroclor-1242 ND 0.50 Aroclor-1248 ND 0.50 Aroclor-1254 ND 0.50 Aroclor-1260 ND 0.50 Aroclor-1262 ND 0.50

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	53	40 - 106
Decachlorobiphenyl	57	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0216	Lab Sample ID:	AB33530
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.0
Volume Extracted:	1050 mL	GPC Factor:	N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	· ND	0.50	
11097-69-1	Aroclor-1254	ND ·	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

		**
Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	62	40 - 106
Decachlorobiphenyl	94	27 - 128

Comments:

12090046\$PCBW

HRS Reference #88 Page 89 of 165

Park Street - Bennington, VT

PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0217	Lab Sample ID:	AB33531
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.0
Volume Extracted:	1040 mL	GPC Factor:	N/A

		Concentration	RL	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND ·	0.50	
11097-69-1	Aroclor-1254	ND .	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND .	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	78	40 - 106
Decachlorobiphenyl	108	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0218	Lab Sample ID:	AB33532
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.6
Volume Extracted:	1010 mL	GPC Factor:	N/A

		Concentration	RL	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
. 12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	· ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	75	40 - 106
Decachlorobiphenyl	101	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0219	Lab Sample ID:	AB33533
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.1
Volume Extracted:	1000 mL	GPC Factor:	N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	<u> </u>
11104-28-2	Aroclor-1221	15 11 1		
	·	ND	0.50	
11141-16-5	Aroclor-1232	· ND	0.50	
53469-21-9	Aroclor-1242	ND	· 0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	•

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	54	40 - 106
Decachlorobiphenyl	86	27 - 128

Comments:

12090046\$PCBW

HRS Reference #88

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0220	Lab Sample ID:	AB33534
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.8
Volume Extracted:	1020 mL	GPC Factor:	N/A

		Concentration	RL	
CAS Number	Compound	ug/L	ue/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	. 0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	67	40 - 106
Decachlorobiphenyl	110	27 - 128

Comments:

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0221	Lab Sample ID:	AB33535
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.2
Volume Extracted:	1010 mL	GPC Factor:	N/A

		Concentration	\mathbf{RL}	a
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	-,
11097-69-1	Aroclor-1254	ND	0.50	•
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	57	40 - 106
Decachlorobiphenyl	70	27 - 128

Comments:

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0222	Lab Sample ID:	AB33536
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	7.4
Volume Extracted:	1000 mL	GPC Factor:	N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND .	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	50	40 - 106
Decachlorobiphenyl	92	27 - 128

Comments:

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0223	Lab Sample ID:	AB33537
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.8
Volume Extracted:	1040 mL	GPC Factor:	N/A

		Concentration	\mathbf{RL}	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	. 0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND ·	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	58	40 - 106
Decachlorobiphenyl	93	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0224	Lab Sample ID:	AB33538
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	·N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.0
Volume Extracted:	1000 mL	GPC Factor:	N/A

		Concentration	\mathbf{RL}	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	· ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	•
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	, ND	0.50	

Surrogate Compounds	Recoveries (%)	OC Ranges
2,4,5,6-Tetrachloro-m-xylene	54	40 - 106
Decachlorobiphenyl	89	27 - 128

Comments:

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0225	Lab Sample ID:	AB33539
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.7
Volume Extracted:	1020 mL	GPC Factor:	N/A

CAC Number	Compound	Concentration	RL	Qualifier
CAS Number	Compound	ug/L	ug/L	Quanner
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	OC Ranges
2,4,5,6-Tetrachloro-m-xylene	58	40 - 106
Decachlorobiphenyl	 90	27 - 128

Comments:

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0226	Lab Sample ID:	AB33540
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	6.5
Volume Extracted:	1010 mL	GPC Factor:	N/A

		Concentration	RL	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND ·	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	40 - 106
Decachlorobiphenyl	105	27 - 128

Comments:

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Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0227	Lab Sample ID:	AB33541
Date of Collection:	9/26/2012	Matrix	Water PE
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	2
Wet Weight Extracted:	N/A	pH:	5.9
Volume Extracted:	1000 mL	GPC Factor:	N/A

		Concentration	\mathbf{RL}	
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	1.0	
11104-28-2	Aroclor-1221	ND	1.0	
11141-16-5	Aroclor-1232	ND	1.0	
53469-21-9	Aroclor-1242	ND	1.0	
12672-29-6	Aroclor-1248	11	1.0	•
11097-69-1	Aroclor-1254	ND	1.0	•
11096-82-5	Aroclor-1260	12	1.0	
11100-14-4	Aroclor-1262	ND	1.0	
37324-23-5	Aroclor-1268	ND	1.0	-

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	71	40 - 106
Decachlorobiphenyl	87	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0228	Lab Sample ID:	AB33542
Date of Collection:	9/26/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.7
Volume Extracted:	1000 mL	GPC Factor:	N/A

		Concentration	RL	
CAS Number	Compound	ug/L	ue/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	52	40 - 106
Decachlorobiphenyl	91	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0229	Lab Sample ID:	AB33543
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.2
Volume Extracted:	900 mL	GPC Factor:	N/A

		Concentration	RL	0
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.55	
11104-28-2	Aroclor-1221	ND	0.55	
11141-16-5	Aroclor-1232	ND	0.55	
53469-21-9	Aroclor-1242	ND	0.55	
12672-29-6	Aroclor-1248	· ND	0.55	
11097-69-1	Aroclor-1254	. ND	0.55	
11096-82-5	Aroclor-1260	ND	0.55	
11100-14-4	Aroclor-1262	ND	0.55	
37324-23-5	Aroclor-1268	. ND	0.55	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	69	40 - 106
Decachlorobiphenyl	105	27 - 128

Park Street - Bennington, VT PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0230	Lab Sample ID:	AB33544
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.2
Volume Extracted:	500 mL	GPC Factor:	N/A

CAS Number	Compound	Concentration	RL	Oualifier
CAS Number	Compound	ug/L_	ug/L	Quantitei
12674-11-2	Aroclor-1016	ND	1.0	
11104-28-2	Aroclor-1221	ND	1.0	
11141-16-5	Aroclor-1232	ND	1.0	
53469-21-9	Aroclor-1242	ND	1.0	
12672-29-6	Aroclor-1248	ND	1.0	
11097-69-1	Aroclor-1254	ND	1.0	,
11096-82-5	Aroclor-1260	ND	1.0	
11100-14-4	Aroclor-1262	ND	1.0	
37324-23-5	Aroclor-1268	ND	1.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	51	40 - 106
Decachlorobiphenyl	77	27 - 128

Park Street - Bennington, VT

PCBs in Water Low Level

Client Sample ID:	R01-120403CY-0231	Lab Sample ID:	AB33545
Date of Collection:	9/27/2012	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/6/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	8.0
Volume Extracted:	1030 mL	GPC Factor:	N/A

		Concentration	RL		
CAS Number	Compound	ug/L	ug/L	Qualifier	
12674-11-2	Aroclor-1016	ND	0.50		
11104-28-2	Aroclor-1221	ND	0.50		
11141-16-5	Aroclor-1232	ND	0.50		
53469-21-9	Aroclor-1242	ND	0.50		
12672-29-6 ·	Aroclor-1248	ND	0.50		
11097-69-1	Aroclor-1254	ND .	0.50		
11096-82-5	Aroclor-1260	ND	0.50		
11100-14-4	Aroclor-1262	ND	0.50		
37324-23-5	Aroclor-1268	ND .	0.50		

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	0	40 - 106
Decachlorobiphenyl	0	27 - 128

Comments: Evidently surrogates were not spiked into this sample.

Park Street - Bennington, VT Blank for PCBs Water

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	GW
Date of Extraction:	10/2/12	Final Volume:	5 mL
Date of Analysis:	10/5/12	Percent Solids:	N/A
Dry Weight Extracted:	N/A	Extract Dilution:	1
Wet Weight Extracted:	N/A	pH:	5.9
Volume Extracted:	1000 mL	GPC Factor:	N/A

12674-11-2 Aroclor-1 11104-28-2 Aroclor-1 11141-16-5 Aroclor-1 53469-21-9 Aroclor-1 12672-29-6 Aroclor-1 11097-69-1 Aroclor-1	C1	Concentration	RL	0116
CAS Number	Compound	ug/L	ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
. 12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	· ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	61	40 - 106
Decachlorobiphenyl	9 9	27 - 128

QA/QC RESULTS LABORATORY FORTIFIED BLANK (LFB) / LABORATORY FORTIFIED BLANK DUPLICATE (LFB Dup)

Sample ID: AB33545

COMPOUND	SPIKE ADDED ug/L	LFB CONCENTRATION ug/L	LFB RECOVERY %	QC LIMITS (% REC)
Aroclor-1016	3.0	2.35	78	70 - 130
Aroclor-1254	ND .			
Aroclor-1260	3.0	3.10	103	70 - 130

COMPOUND	LFB Dup CONCENTRATION ug/L	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
Aroclor-1016	2.26	75.3	3.9	50
Aroclor-1260	3.00	100	3.3	50

Samples in Batch: AB33527, AB33528, AB33529, AB33530, AB33531, AB33532, AB33533, AB33534, AB33535, AB33536, AB33537, AB33538, AB33539, AB33540, AB33541, AB33542, AB33542, AB33544, AB33545

Samplers Signatures: //

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Weston Solutions, Inc.

Region 1 START Andrew Demisor Lie 1. Codeman CHAIN OF CUSTODY RECORD

Park Street

Contact Name: Dan Burgo Contact Phone: 617-918-1052 No: 1-092512-143112-0006

Lab: NERL

Date Delivered: 9/28/2012

Lab#	Sample #	Location	Collected	Sample Time	Analyses	Matrix	Numb Cont	Container	MS/MSD
	R01-120403CY-0213	GW-100	9/27/2012	13:15	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0214	GW-101	9/27/2012	12:50	PCBs	Ground Water	1	1 liter amber	-
	R01-120403CY-0215	GW-102	9/26/2012	15:00	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0216	GW-103	9/26/2012	12:25	PCBs	Ground Water	1	1 liter amber	-
	R01-120403CY-0217	GW-104S	9/26/2012	15:45	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0218	GW-104D	9/26/2012	15:00	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0219	GW-105	9/26/2012	15:20	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0220	GW-106S	9/26/2012	17:45	PCBs	Ground Water	1	1 liter amber	
-	R01-120403CY-0221	GW-106D	9/27/2012	11:30	PCBs	Ground Water	1	1 liter amber	
,	R01-120403CY-0222	GW-107	9/26/2012	18:05	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0223	GW-108S	9/27/2012	13:00	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0224	GW-108D	9/27/2012	11:10	PCBs	Ground Water	1	1 liter amber	<u> </u>
	R01-120403CY-0225	GW-109	9/28/2012	15:00	PCBs	Ground Water	1	1 liter amber	-
	R01-120403CY-0226	RB-01	9/27/2012	15:00	PCBs	Water	1	1 liter amber	-
	R01-120403CY-0227	PE-AA0269	9/26/2012	07:00	PCBs	PE Water	1	ampule	
	R01-120403CY-0228	GW-102-F	9/28/2012	15:10	PCBs	Ground Water	1	1 liter amber	<u> </u>
	R01-120403CY-0229	GW-101-F	9/27/2012	12:55	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0230	GW-106D-F	9/27/2012	11:35	PCBs	Ground Water	1	1 liter amber	
	R01-120403CY-0231	GW-108D-F	9/27/2012	11:15	PCBs	Ground Water	1	1 liter amber	

:	SAMPLES TRANSFERRED FROM
Special Instructions:	CHAIN OF CUSTODY#

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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United States Environmental Protection Agency Office of Environmental Measurement & Evaluation 11 Technology Drive North Chelmsford, MA 01863-2431

Laboratory Report

September 18, 2012

Cathy Young - Mail Code OSRR02-2 US EPA New England R1

Project Number: 12080030

Project: Park Street - Bennington, VT

Analysis: PCBs Medium Level in Soils and Sediments

Analyst: Paul Carroll

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, PESTSOIL3.SOP.

The SOP is based on EPA SW-846 Method 8082

The analysis was performed using high resolution capillary column chromatography on an Agilent 6890 Series gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness.

Date Samples Received by the Laboratory: 08/10/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340.

Sincerely,

Digitally signed by Dan Boudreau DN: cn=Dan Boudreau, o=EPA,

ou=EIA,

email=boudreau,dan@epa.gov, c=US

Date: 2012,09,18 10:26:14 -04'00'

12080030\$PCBMS

HRS Reference #88 Page 108 of 165

Qualifiers: RL = Reporting limit

- ND = Not Detected above Reporting limit
- NA = Not Applicable due to high sample dilutions or sample interferences
- J = Estimated value
- E = Estimated value exceeds the calibration range
- L = Estimated value is below the calibration range
- B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
- C = The identification has been confirmed by GC/MS.
- R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

12080030\$PCBMS

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0107	Lab Sample ID:	AB31761
Date of Collection:	8/7/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	64%
Dry Weight Extracted:	3.87 grams	Extract Dilution:	1
Wet Weight Extracted:	6.08 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.13	_
11104-28-2	Aroclor-1221	ND	0.13	
11141-16-5	Aroclor-1232	ND	0.13	
53469-21-9	Aroclor-1242	0.25	0.13	P
12672-29-6	Aroclor-1248	ND	0.13	
11097-69-1	Aroclor-1254	. ND	0.13	
11096-82-5	Aroclor-1260	ND	0.13	
11100-14-4	Aroclor-1262	ND	0.13	
37324-23-5	Aroclor-1268	. ND	0.13	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	73	36 - 131
Decachlorobiphenyl	91	30 - 165

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0110	Lab Sample ID:	AB31762
Date of Collection:	8/7/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	76%
Dry Weight Extracted:	4.66 grams	Extract Dilution:	1
Wet Weight Extracted:	6.13 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.11	
11104-28-2	Aroclor-1221	ND	0.11	
11141-16-5	Aroclor-1232	ND	0.11	
53469-21-9	Aroclor-1242	ND	0.11	
12672-29-6	Aroclor-1248	ND	0.11	
11097-69-1	Aroclor-1254	ND	0.11	•
11096-82-5	Aroclor-1260	ND	0.11	
11100-14-4	Aroclor-1262	ND	0.11	
37324-23-5	Aroclor-1268	ND	0.11	•

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	68	36 - 131
Decachlorobiphenyl	81	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0113	Lab Sample ID:	AB31763
Date of Collection:	8/7/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	77%
Dry Weight Extracted:	4.84 grams	Extract Dilution:	1
Wet Weight Extracted:	6.27 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	32	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: The tetrachloroxylene surrogate recovery was below the QC limit. Surrogate recovery for the decachlorobiphenyl was within specification.

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0117	Lab Sample ID:	AB31764
Date of Collection:	8/7/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	14%
Dry Weight Extracted:	0.78 grams	Extract Dilution:	1
Wet Weight Extracted:	5.65 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Oualifier
	•	mg/Kg	III E/ IX E	Quantici
12674-11-2	Aroclor-1016	ND	0.64	
11104-28-2	Aroclor-1221	ND	0.64	
11141-16-5	Aroclor-1232	ND	0.64	
53469-21-9	Aroclor-1242	3,2	0.64	P
12672-29-6	Aroclor-1248	ND·	0.64	
11097-69-1	Aroclor-1254	ND	0.64	
11096-82-5	Aroclor-1260	ND	0.64	
11100-14-4	Aroclor-1262	ND	0.64	
37324-23-5	Aroclor-1268	ND	0.64	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	66	36 - 131
Decachlorobiphenyl	85	30 - 165

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0136	Lab Sample ID:	AB31765
Date of Collection:	8/7/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	73%
Dry Weight Extracted:	4.59 grams	Extract Dilution:	1
Wet Weight Extracted:	6.28 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.11	
11104-28-2	Aroclor-1221	ND	0.11	
11141-16-5	Aroclor-1232	ND	0.11	
53469-21-9	Aroclor-1242	0.25	0.11	
12672-29-6	Aroclor-1248	ND	0:11	
11097-69-1	· Aroclor-1254	ND	0.11	
11096-82-5	Aroclor-1260	ND	0.11	
11100-14-4	Aroclor-1262	ND	0.11	
37324-23-5	Aroclor-1268	ND	0.11	

Surrogate Compounds	Recoveries (%)	OC Pangas
2,4,5,6-Tetrachloro-m-xylene	79	QC Ranges 36 - 131
Decachlorobiphenyl	98	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0139	Lab Sample ID:	AB31766
Date of Collection:	8/8/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	65%
Dry Weight Extracted:	3.88 grams	Extract Dilution:	1
Wet Weight Extracted:	5.94 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.13	
11104-28-2	Aroclor-1221	ND	0.13	
11141-16-5	Aroclor-1232	ND	0.13	
53469-21-9	Aroclor-1242	ND	0.13	
12672-29-6	Aroclor-1248	ND ·	0.13	
11097-69-1	Aroclor-1254	ND	0.13	
11096-82-5	Aroclor-1260	ND	0.13	
11100-14-4	Aroclor-1262	ND	0.13	
37324-23-5	Aroclor-1268	ND	0.13	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	86	36 - 131
Decachlorobiphenyl	97	30 - 165

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0144	Lab Sample ID:	AB31767
Date of Collection:	8/8/2012	Matrix	Sediment
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	75%
Dry Weight Extracted:	4.15 grams	Extract Dilution:	1
Wet Weight Extracted:	5.52 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.12	
11104-28-2	Aroclor-1221	ND	0.12	
11141-16-5	Aroclor-1232	ND	0.12	
53469-21-9	Aroclor-1242	· ND	0.12	
12672-29-6	Aroclor-1248	ND	0.12	
11097-69-1	Aroclor-1254	. ND	0.12	
11096-82-5	Aroclor-1260	ND	0.12	
11100-14-4	Aroclor-1262	ND	0.12	
37324-23-5	Aroclor-1268	ND	0.12	

Surrogate Compounds	Recoveries (%)	QC Ranges	
2,4,5,6-Tetrachloro-m-xylene	39	36 - 131	
Decachlorobiphenyl	64	30 - 165	

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0147	Lab Sample ID:	AB31768
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	62%
Dry Weight Extracted:	3.79 grams	Extract Dilution:	1
Wet Weight Extracted:	6.15 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
		mg/Ag	III Z/INZ	Quanner
12674-11-2	Aroclor-1016	ND	0.13	
11104-28-2	Aroclor-1221	ND	0.13	
11141-16-5	Aroclor-1232	ND	0.13	
53469-21-9	Aroclor-1242	ND	0.13	
12672-29-6	Aroclor-1248	ND	0.13	•
11097-69-1	Aroclor-1254 · ·	ND	0.13	
11096-82-5	Aroclor-1260	ND	0.13	
11100-14-4	Aroclor-1262	ND	0.13	
37324-23-5	Aroclor-1268	ND	0.13	

Surrogate Compounds	Recoveries (%)	OC Ranges
2,4,5,6-Tetrachloro-m-xylene	79	36 - 131
Decachlorobiphenyl	106	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0148	Lab Sample ID:	AB31769
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	59%
Dry Weight Extracted:	3.81 grams	Extract Dilution:	1
Wet Weight Extracted:	6.45 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.13	
11104-28-2	Aroclor-1221	ND	0.13	
11141-16-5	Aroclor-1232	ND	0.13	
53469-21-9	Aroclor-1242	0.39	0.13	
12672-29-6	Aroclor-1248	· ND	0.13	
11097-69-1	Aroclor-1254	· ND	0.13	
11096-82-5	Aroclor-1260	0.22	0.13	
11100-14-4	Aroclor-1262	ND	0.13	
37324-23-5	Aroclor-1268	. ND	0.13	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	77	36 - 131
Decachlorobiphenyl	108	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0149	Lab Sample ID:	AB31770
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	79%
Dry Weight Extracted:	4.66 grams	Extract Dilution:	1
Wet Weight Extracted:	5.92 grams	рН:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.11	
11104-28-2	Aroclor-1221	ND	0.11	
11141-16-5	Aroclor-1232	ND	0.11	
53469-21-9	Aroclor-1242	ND	0.11	
12672-29-6	Aroclor-1248	ND	0.11	
11097-69-1	Aroclor-1254	ND	0.11	
11096-82-5	Aroclor-1260	ND	0.11	
11100-14-4	Aroclor-1262	ND	0.11	
37324-23-5	Aroclor-1268	ND	0.11	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	36 - 131
Decachlorobiphenyl	121	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY-0151	Lab Sample ID:	AB31771
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	89%
Dry Weight Extracted:	5.31 grams	Extract Dilution:	I
Wet Weight Extracted:	6.00 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration	RL	Oualifier
CAS Number	Compound	mg/Kg	mg/Kg	Quantier
12674-11-2	Aroclor-1016	ND	0.09	
11104-28-2	Aroclor-1221	ND	0.09	
11141-16-5	Aroclor-1232	ND	0.09	
53469-21-9	Aroclor-1242	ND	0.09	
12672-29-6	· Aroclor-1248	ND	. 0.09	
11097-69-1	Aroclor-1254	ND	0.09	
11096-82-5	Aroclor-1260	ND	0.09	
11100-14-4	Aroclor-1262	ND	0.09	
37324-23-5	Aroclor-1268	ND	0.09	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	91	36 - 131
Decachlorobiphenyl	99	30 - 165

Comments:

HRS Reference #88

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Park Street - Bennington, VT Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Soil
Date of Extraction:	8/15/12	Final Volume:	5 mL
Date of Analysis:	9/4/12	Percent Solids:	100%
Dry Weight Extracted:	5.15 grams	Extract Dilution:	1
Wet Weight Extracted:	5.15 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND ·	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	36 - 131
Decachlorobiphenyl	97	30 - 165

MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Park Street - Bennington, VT Sample ID: AB31771

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Aroclor-1254	0.6	ND	0.59	95	70 - 130
Comments:					

Sample ID: AB31771

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION mg/Kg	MSD % REC	RPD %	QC LIMITS RPD
Aroclor-1254	0.6	0.63	100	5	. 50

Comments:

12:4:4800 PGBLC

Laboratory Duplicate Results

Park Street - Bennington, VT

Sample ID: AB31771

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aroclor-1016	ND	ND	ND	50
Aroclor-1221	ND	ND	ND	50
Aroclor-1232	ND	ND	ND	50
Aroclor-1242	ND	ND	ND	50
Aroclor-1248	ND	ND	ND	50
Aroclor-1254	ND	ND	ND	50
Aroclor-1260	ND	ND	ND	50
Aroclor-1262	ND	ND	ND	50
Aroclor-1268	ND	ND	ND	50

Page 1 of 2

Samplers Signatures

CHAIN OF CUSTODY RECORD

Project Code: Park Street Contact Name: Cathy Young Contact Phone: 617-918-1217 No: 1-080912-105002-0004

DateShipped: 8/9/2012

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSD
	R01-120403CY-0107	SD-513	C200	PCBs	Sediment	8/7/2012	10:30	1	8 oz Amber	
	R01-120403CY-0110	SD-516	D200	PCBs	Sediment	8/7/2012	10:42	1	8 oz Amber	
	R01-120403CY-0113	SD-519	E200	PCBs	Sediment	8/7/2012	10:00	1	8 oz Amber	
	R01-120403CY-0117	SD-523	F200	PCBs	Sediment	8/7/2012	12:30	1	8 oz Amber	-
	R01-120403CY-0136	SD-542	K400	PCBs	Sediment	8/7/2012	14:50	1	8 oz Amber	
	R01-120403CY-0139	SD-545	M300	PCBs	Sediment	8/8/2012	08:00	1	8 oz Amber	
	R01-120403CY-0144	SD-550	F250	PCBs	Sediment	8/8/2012	08:15	2	8 oz Amber	Y
	R01-120403CY-0147	P-410-SS-01	Near tank	PCBs	Soil	8/8/2012	10:21	1	4 oz Amber	
	R01-120403CY-0148	P-410-SS-02	Wall near tank	PCBs	Soil	8/8/2012	10:26	1	4 oz Amber	
	R01-120403CY-0149	P-410-SS-03	Wall near well	PCBs	Soil	8/8/2012	10:30	1	4 oz Amber	
	R01-120403CY-0151	P-414-SB-02		PCBs	Soil	8/8/2012	12:00	1	4 oz Amber	
	R01-120403CY-0156	P-414-SB-07		PCBs	Soli	8/8/2012	12:00	1	4 oz Amber	
	R01-120403CY-0158	P-414-SB-09		PCBs	Soii	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0159	P-414-SB-10		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0162	P-538-SB-01	A100	PCBs	Soil	8/8/2012	14:40	1	4 oz Amber	
	R01-120403CY-0175	P-538-SB-14	D000	PCBs	Soil	8/8/2012	14:05	2	4 oz Amber	Y
	R01-120403CY-0185	SD-600	E200	PCBs	Sediment	8/7/2012	10:00	1	8 oz Amber	
	R01-120403CY-0186	P-414-SB-100		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0190	P-594-SB-12	C150	PCBs	Soil	8/9/2012	09:10	1	4 oz Amber	

· ·	SAMPLES TRANSFERRED FROM
Special Instructions:	CHAIN OF CUSTODY#

ltems/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date,	Time
	Spor	8/9/12	Quat CUII	8-9-12	1250	<u> </u>	& cott (1)	84012	fair)	8/4/12	11:12
	001	//							11	16	
								-			

DateShipped: 8/9/2012

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSD
 	R01-120403CY-0195	P-594-SB-17	E000	PCBs	Soil	8/9/2012	09:30	1	4 oz Amber	
	R01-120403CY-0198	P-594-SB-20	E150	PCBs	Soil	8/9/2012	10:20	1	4 oz Amber	- i+
	R01-120403CY-0209	TT2814		PCBs	Soil	8/9/2012	11:00		2 oz Amber	1 2
	R01-120403CY-0210	RB-01	auger head	PCBs	Filtered Water	8/9/2012	11:30	2	1 liter amber	
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Special Instructions:	CHAIN OF CUSTODY#
	

Items/Reason	Relinquiated by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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United States Environmental Protection Agency Office of Environmental Measurement & Evaluation 11 Technology Drive North Chelmsford, MA 01863-2431

Laboratory Report

September 18, 2012

Cathy Young - Mail Code OSRR02-2 US EPA New England R1

Project Number: 12080031

Park Street - Bennington, VT Project:

Analysis: PCBs Medium Level in Soils and Sediments

Analyst: Paul Carroll

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, PESTSOIL3.SOP.

The SOP is based on EPA SW-846 Method 8082

The analysis was performed using high resolution capillary column chromatography on an Agilent 6890 Series gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness.

Date Samples Received by the Laboratory: 08/10/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME · Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340.

Sincerely,

Digitally signed by Dan Boudreau DN: cn=Dan Boudreau, o=EPA,

ou=EIA,

email=boudreau.dan@epa.gov, c=US

Date: 2012.09.18 11:13:16 -04'00'

12080031\$PCBMS

HRS Reference #88 Page 126 of 165

Qualifiers: RL = Reporting limit

- ND = Not Detected above Reporting limit
- NA = Not Applicable due to high sample dilutions or sample interferences
- J = Estimated value
- E = Estimated value exceeds the calibration range
- L = Estimated value is below the calibration range
- B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
- C =The identification has been confirmed by GC/MS.
- R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

12080031\$PCBMS

HRS Reference #88 Enga 127 of 1. Page 127 of 1.

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0156	Lab Sample ID:	AB31772
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	85%
Dry Weight Extracted:	5.38 grams	Extract Dilution:	1
Wet Weight Extracted:	6.34 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

C	Concentration	RL	Ouglifion
Compound	mg/Kg	mg/Kg	Qualifier
Aroclor-1016	ND	0.09	
Aroclor-1221	ND	0.09	
Aroclor-1232	ND	0.09	
Aroclor-1242	ND	0.09	
Aroclor-1248	ND	0.09	
Aroclor-1254	ND	0.09	
Aroclor-1260	ND	0.09	
Aroclor-1262	ND	0.09	
Aroclor-1268	ND	0.09	
	Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-1262	Compound mg/Kg Aroclor-1016 ND Aroclor-1221 ND Aroclor-1232 ND Aroclor-1242 ND Aroclor-1248 ND Aroclor-1254 ND Aroclor-1260 ND Aroclor-1262 ND	Compound mg/Kg mg/Kg Aroclor-1016 ND 0.09 Aroclor-1221 ND 0.09 Aroclor-1232 ND 0.09 Aroclor-1242 ND 0.09 Aroclor-1248 ND 0.09 Aroclor-1254 ND 0.09 Aroclor-1260 ND 0.09 Aroclor-1262 ND 0.09

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	71	36 - 131
Decachlorobiphenyl	100	30 - 165

Comments:

12080031\$PCBMS

HRS Reference #88 Page 128 of 165

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0158	Lab Sample ID:	AB31773
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	90%
Dry Weight Extracted:	5.41 grams	Extract Dilution:	I
Wet Weight Extracted:	6.00 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Oualifier
12674-11-2	Aroclor-1016	ND	0.09	
11104-28-2	Aroclor-1221	ND	0.09	
11141-16-5	Aroclor-1232	ND	0.09	
53469-21-9	Aroclor-1242	ND	0.09	
12672-29-6	Aroclor-1248	ND ·	0.09	
11097-69-1	Aroclor-1254	ND	0.09	
11096-82-5	Aroclor-1260	ND	0.09	
11100-14-4	Aroclor-1262	ND	0.09	
37324-23-5	Aroclor-1268	ND .	0.09	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	60	36 - 131
Decachlorobiphenyl	94	30 - 165

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0159	Lab Sample ID:	AB31774
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	86%
Dry Weight Extracted:	5.20 grams	Extract Dilution:	1
Wet Weight Extracted:	6.08 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	•
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	•

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Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	57	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0162	Lab Sample ID:	AB31775
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	83%
Dry Weight Extracted:	4.92 grams	Extract Dilution:	1
Wet Weight Extracted:	5.94 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	·0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	66	36 - 131
Decachlorobiphenyl	95	30 - 165

Comments:

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Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0175	Lab Sample ID:	AB31776
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	77%
Dry Weight Extracted:	4.38 grams	Extract Dilution:	1
Wet Weight Extracted:	5.72 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.11	-
11104-28-2	Aroclor-1221	ND	0.11	
11141-16-5	Aroclor-1232	ND	0.11	
53469-21-9	Aroclor-1242	ND	0.11	
12672-29-6	Aroclor-1248	· ND	0.11	
11097-69-1	Aroclor-1254	ND	0.11	
11096-82-5	Aroclor-1260	ND	0.11	
11100-14-4	Aroclor-1262	ND	0.11	
37324-23-5	Aroclor-1268	. ND	0.11	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	64	36 - 131
Decachlorobiphenyl	103	30 - 165

Comments:

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0185	Lab Sample ID:	AB31777
Date of Collection:	8/7/2012	Matrix	Sediment
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	78%
Dry Weight Extracted:	4.65 grams	Extract Dilution:	1
Wet Weight Extracted:	5.99 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration _mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.11	
11104-28-2	Aroclor-1221	ND	0.11	
11141-16-5	Aroclor-1232	ND	0.11	
53469-21-9	Aroclor-1242	ND	0.11	
12672-29-6	Aroclor-1248	· ND	0.11	
11097-69-1	Aroclor-1254	ND	0.11	
11096-82-5	Aroclor-1260	ND	0.11	
11100-14-4	Aroclor-1262	ND	0.11	
37324-23-5	Aroclor-1268	ND	0.11	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	55	36 - 131
Decachlorobiphenyl	93	30 - 165

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0186	Lab Sample ID:	AB31778
Date of Collection:	8/8/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	85%
Dry Weight Extracted:	5.04 grams	Extract Dilution:	1
Wet Weight Extracted:	5.90 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Oualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND ,	0.10	

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Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	52	36 - 131
Decachlorobiphenyl	85	30 - 165

Comments:

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0190	Lab Sample ID:	AB31779
Date of Collection:	8/9/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	84%
Dry Weight Extracted:	5.43 grams	Extract Dilution:	1
Wet Weight Extracted:	6.47 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier

12674-11-2	Aroclor-1016	ND	0.09	
11104-28-2	Aroclor-1221	ND	0.09	
11141-16-5	Aroclor-1232	ND	0.09	
53469-21-9	Aroclor-1242	ND	0.09	
12672-29-6	Aroclor-1248	· ND	0.09	
11097-69-1	Aroclor-1254	ND	0.09	
11096-82-5	Aroclor-1260	ND	0.09	
11100-14-4	Aroclor-1262	ND	0.09	
37324-23-5	Aroclor-1268	ND	0.09	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	87	36 - 131
Decachlorobiphenyl	97	30 - 165

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0195	Lab Sample ID:	AB31780
Date of Collection:	8/9/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	73%
Dry Weight Extracted:	4.24 grams	Extract Dilution:	1
Wet Weight Extracted:	5.82 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.12	_
11104-28-2	Aroclor-1221	ND	0.12	
11141-16-5	Aroclor-1232	ND	0.12	
53469-21-9	Aroclor-1242	ND	0.12	
12672-29-6	Aroclor-1248	ND	0.12	
11097-69-1	Aroclor-1254	ND	0.12	
11096-82-5	Aroclor-1260	ND	0.12	
11100-14-4	Aroclor-1262	ND	0.12	
37324-23-5	Aroclor-1268	ND	0.12	

Surrogate Compounds	Recoveries (%)	QC Ranges	
2,4,5,6-Tetrachloro-m-xylene	67	36 - 131	
Decachlorobiphenyl	100	30 - 165	

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0198	Lab Sample ID:	AB31781
Date of Collection:	8/9/2012	Matrix	Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	87%
Dry Weight Extracted:	5.33 grams	Extract Dilution:	1
Wet Weight Extracted:	6.13 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.09	
11104-28-2	Aroclor-1221	ND	0.09	
11141-16-5	Aroclor-1232	ND	0.09	
53469-21-9	Aroclor-1242	ND	0.09	
12672-29-6	Aroclor-1248	ND	0.09	
11097-69-1	Aroclor-1254	ND	0.09	
11096-82-5	Aroclor-1260	ND	0.09	
11100-14-4	Aroclor-1262	ND	0.09	
37324-23-5	Aroclor-1268	ND	0.09	

Surrogate Compounds	Recoveries (%)	QC Ranges	
2,4,5,6-Tetrachloro-m-xylene	76	36 - 131	
Decachlorobiphenyl	99	30 - 165	

Park Street - Bennington, VT

PCBs Medium Level in Soils and Sediments

Client Sample ID:	R01-120403CY0-0209	Lab Sample ID:	AB31782
Date of Collection:	8/9/2012	Matrix	PE Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	100%
Dry Weight Extracted:	5.12 grams	Extract Dilution:	1
Wet Weight Extracted:	5.12 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	•
11097-69-1	Aroclor-1254	0.26	0.10	•
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	76	36 - 131
Decachlorobiphenyl	102	30 - 165

Park Street - Bennington, VT Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	PE Soil
Date of Extraction:	8/17/12	Final Volume:	5 mL
Date of Analysis:	9/5/12	Percent Solids:	100%
Dry Weight Extracted:	5.21 grams	Extract Dilution:	1
Wet Weight Extracted:	5.22 grams	pH:	N/A
Volume Extracted:	N/A	GPC Factor	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	. ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10.	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	•

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	56	36 - 131
Decachlorobiphenyl	102	30 - 165

MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Park Street - Bennington, VT Sample ID: AB31781

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Aroclor-1254	0.7	ND	0.69	105	70 - 130
Comments:					

Sample ID: AB31781

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION mg/Kg	MSD % REC	RPD %	QC LIMITS RPD
Aroclor-1254	0.7	0.67	. 103	1	50

Laboratory Duplicate Results

Park Street - Bennington, VT

Sample ID: AB31781

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aroclor-1016	ND	ND	ND	50
Aroclor-1221	ND	ND	ND	50
Aroclor-1232	ND	ND	ND	50
Aroclor-1242	ND	ND	ND	50
Aroclor-1248	ND	ND	ND	50
Aroclor-1254	ND	ND	ND	50
Aroclor-1260	ND	ND	ND	50
Aroclor-1262	ND	ND	ND	50
Aroclor-1268	ND	ND	ND	50

Continue of the

Page 1 of 2

Samplers Signatures

CHAIN OF CUSTODY RECORD

Project Code: Park Street Contact Name: Cathy Young Contact Phone: 617-918-1217 No: 1-080912-105002-0004

DateShipped: 8/9/2012

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSC
<u> </u>	R01-120403CY-0107	SD-513	C200	PCBs	Sediment	8/7/2012	10:30	1	8 oz Amber	
	R01-120403CY-0110	SD-516	D200	PCBs	Sediment	8/7/2012	10:42	1	8 oz Amber	
	R01-120403CY-0113	SD-519	E200	PCBs	Sediment	8/7/2012	10:00	1	8 oz Amber	
	R01-120403CY-0117	SD-523	F200	PCBs	Sediment	8/7/2012	12:30	1	8 oz Amber	
	R01-120403CY-0136	SD-542	K400	PCBs	Sediment	8/7/2012	14:50	1	8 oz Amber	
	R01-120403CY-0139	SD-545	M300	PCBs	Sediment	8/8/2012	08:00	1	8 oz Amber	
	R01-120403CY-0144	SD-550	F250	PCBs	Sediment	8/8/2012	08:15	2	8 oz Amber	V
	R01-120403CY-0147	P-410-SS-01	Near tank	PCBs	Soil	8/8/2012	10:21	1	4 oz Amber	
	R01-120403CY-0148	P-410-SS-02	Wall near tank	PCBs	Soil	8/8/2012	10:26	<u></u>	4 oz Amber	
	R01-120403CY-0149	P-410-SS-03	Wall near well	PCBs	Soit	8/8/2012	10:30		4 oz Amber	-
	R01-120403CY-0151	P-414-SB-02		PCBs	Soil	8/8/2012	12:00		4 oz Amber	
	R01-120403CY-0156	P-414-SB-07		PCBs	Soil	8/8/2012	12:00	- 1	4 oz Amber	
	R01-120403CY-0158	P-414-SB-09		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0159	P-414-SB-10		PCBs	Soil	8/8/2012	11:15	1	4 oz Amber	
	R01-120403CY-0162	P-538-SB-01	A100	PCBs	Soil	8/8/2012	14:40	1	4 oz Amber	
	R01-120403CY-0175	P-538-SB-14	D000	PCBs	Soil	8/8/2012	14:05	2	4 oz Amber	\ <u>\</u>
	R01-120403CY-0185	SD-600	E200	PCBs	Sediment	8/7/2012	10:00	<u>_</u>	8 oz Amber	+
	R01-120403CY-0186	P-414-SB-100		PCBs	Soil	8/8/2012	11:15		4 oz Amber	
	R01-120403CY-0190	P-594-SB-12	C150	PCBs	Soil	8/9/2012	09:10		4 oz Amber	

	SAMPLES TRANSFERRED FROM				
Special Instructions:	CHAIN OF CUSTODY #				

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date, Time
	May	8/9/12	Quat CUII	8-9-12	1250%	3	Scott Cla	81012	0	7/8
	011	//							11	16
			· .	·						

Samplers Signatures

Project Code: Park Street Contact Name: Cathy Young Contact Phone: 617-918-1217

DateShipped: 8/9/2012

Lab#	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	MS/MSD
	R01-120403CY-0195	P-594-SB-17	E000	PCBs	Soil	8/9/2012	09:30	1	4 oz Amber	
	R01-120403CY-0198	P-594-SB-20	E150	PCBs	Soil	8/9/2012	10:20	1	4 oz Amber	
	R01-120403CY-0209	TT2814		PCBs	Soil	8/9/2012	11:00	1	2 oz Amber	
	R01-120403CY-0210	RB-01	auger head	PCBs	Filtered Water	8/9/2012	11:30	2	1 liter amber	
 	<u> </u>	- 			ļ ————					+
									<u> </u>	
			· ·		<u> </u>	<u> </u>				<u> </u>
						<u> </u>				
					_	<u> </u>				
	 									
	 									
 										

	SAMPLES TRANSFERRED FROM
Special Instructions:	CHAIN OF CUSTODY#
	<u> </u>

Items/Reason	Relinquisfled by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Ilm	8/4/12	Dutte WI	8-9-12	i2:50 k		Dutt Uff	8-1012	Alus	8/1/12	11-20
0	11	//	1				11/			10	

Appendix F

Boring Logs

HRS Reference #88 Pege 144 (c) Page 144 (c) Page 145 (c)

		ns, Inc			SOIL BO				age 1 of 2
Project				Park Stre	et Site	Boring ID	NA	Groundwa	ter Levels*
Locatio	n			Benning	ton, Vermont	Well ID	EPA-100	Date	Depth (ft)
Date D	rilled			28-Aug-1	12	Drilling Method	ODEX and Drive and Wash	30-Aug-12	9.30
Drilling	Company			New Har	npshire Boring	Sampling Method	2-in diam. Split Spoon		
Drilling	Foreman			Maniea \	W. Thompson	Completion Depth	32 feet bgs		
Drill Ri				CME-550		Surface Elevation			
Logged				George I	Mavris - Weston,	eam (START	')		
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription		lative Density Descriptor
					0 - 6" - Topsoil				
2		:					ders using ODEX drilling method, a e below the cobbles/boulders.	nd then	
_ ' 4							casing was advanced while using displit spoons and 140 lb. auto-hamn		
6	∇				Water table at 6.61 f	feet bgs.			
8 <u> </u>					0 - 33 feet Gravel	copples and boulders (w	hite, pink, tan, buff, and black qua	rtzite and	
10		NA	NA	NA NA		ragments), and fine-to-co			NA
12									
14									
16									
18									
20									
22									
24									

F:\Park Street\Boring Logs_Final\EPA-100_Final.xls

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Weston Solution	ns, Inc).		SOIL BO	RING/WELL CO	MPLETION LOG	F	Page 2 of 2		
Project			Park Stre	eet Site	Boring ID	NA	Groundwa	ater Levels*		
Location			Benning	ton, Vermont	Well ID	EPA-100	Date	Depth (ft		
Date Drilled			28-Aug-1	12	Drilling Method	ODEX and Drive and Wash	30-Aug-12	9.30		
Drilling Company			New Har	npshire Boring	Sampling Method	2-in diam. Split Spoon	<u> </u>	<u> </u>		
Drilling Foreman			Manlea '	W. Thompson	Completion Depth	32 feet bgs				
Drill Rig Type			CME-550		Surface Elevation					
Logged by			George i	Mavris - Weston,	Superfund Technical	Assessment and Response T	eam (STAR	T)		
Depth Well (ft bgs) Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Description					
28				Split spoon soil sam	pling began at the 33 - 35	foot interval.				
34	1	WOR (12 in)-3-8	11	0 - 11" · Gray, CLAY,	little silt. Wet.			Soft		
36	2	5-6-8-8	20	0 - 8" Gray, CLAY, 8 - 20" Gray, CLAY	little silt. Wet. (with thin laminae of brow	vn silt). Wet.		Stiff		
38					-End of borin	g at 37 feet-				
Well Constru	ction [Details:								
	Scree Riser Filter Bento Grout Concr	sand onite seal t		2-in dian Filter sar Bentonit Grout (P Concrete	neter, Schedule 40 PVC nd (0) from 25 - 32.5 ft te seal from 32.5 - 37 a ortland Cement, Type I e (Sakrete), 0 - 1 ft bgs	nd 10 - 25 ft bgs (2 inches of sa				
	nents fr	vstem - Burmis om top of PV0 ble		bgs = be	ove ground surface low ground surface ot Applicable	WOR = Weight of rods				

Westo	n Solution	ıs, Inc	•		SOIL BO	RING/WELL CO	MPLETION LOG	Pa	age 1 of 2
Project				Park Stre	eet Site	Boring ID	NA	Groundwat	ter Levels*
Locatio	on			Benning	ton, Vermont	Well ID	EPA-101	Date	Depth (ft)
Date D	rilled			22-Aug-1	12	Drilling Method	ODEX and Drive and Wash	30-Aug-12	9.37
Drilling	Company			New Har	mpshire Boring	Sampling Method	2-in diam. Split Spoon		
	Foreman			-	W. Thompson		34.9 feet bgs		
Drill Ri				CME-550		Surface Elevation		/2=1-	
Logged		- tr.	-	George	Mavris - Weston,	eam (START)		
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	I	ative Density Descriptor
2		NA	NA		collected between 2 feet through cobbles/b below the cobbles/b ODEX casing was rer wash drilling method soil sampling. 0 - 25 feet Gravel, metamorphic rock from the cobbles of the cobbl	0 - 22 feet bgs. Continues/boulders, and then drives/boulders. moved and 4-Inch regular d. Used 2-inch diameter s cobbles, and boulders (waragments), and fine-to-confeet bgs.		od to 25 ed once drive and ner for	NA
20		1	17-34-24-15	4		pling began at the 20 - 22 rse-to-fine SAND, little fin Still in coarse over	e-to-coarse gravel, cobbles (angula	ar), and	/ery Dense
24					Advanced borehole		s/boulders using ODEX drilling met	hod.	

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vvesto	on Solution	ıs, ınc	•		<u>- </u>		OMPLETION LOG		Page 2 of 2
Project	:			Park Stre		Boring ID	NA)	ater Levels
Locatio	on			Benning	ton, Vermont	Well ID	EPA-101	Date	Depth (fi
Date D	rilled			22-Aug	12	Drilling Method	ODEX and Drive and Wash	30-Aug-12	2 9.37
Drilling	Company			New Har	npshire Boring	Sampling Method	2-in diam. Split Spoon		
Drilling	Foreman			Manlea '	W. Thompson	Completion Depth	34.9 feet bgs		
	д Туре			CME-550	50X Surface Elevation Superfund Technical Assessment and Response Team				
ogged				George I	Mavris - Weston,	Superfund Technical	Assessment and Response T	eam (STAP	(T)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	R	elative Densit Descriptor
26		2	7-21-34-27	21	10 - 12" Light bro	own, SILT, little clay, trace of own, CLAY, some silt. Wet. own, SILT, little clay. Wet.	coarse gravel (subrounded). Wet.		Hard
28		3	16-23-23-21	16	0 - 16" light bro Wet.	own, SILT, little very fine sa	nd,trace clay and coarse gravel (su	bangular).	Hard
30					ì		bit. Unable to advance beyond 10 drive and wash drilling method.	bgs. Co-	
32	0 - 17" Light brown, SILT, little very fine sand, trace clay. Wet.						Stiff		
- 34		5	12-10-10-12	14	0 - 14" Light bro	own, SILT and very fine SAN	ID, trace clay. Wet.		Very Stiff
-						-End of boring	at 34.9 feet-		
36									
V	Vell Constru	Scree Riser Filter	n		2-in dia Filter sa	meter, Schedule 40 PVC ind (0) from 28 - 34.9 ft	-		t bgs
		Grout	:		Grout (Concre	Bentonite seal from 26 - 28 ft bgs (2 inches of sand on top of bentonite) Grout (Portland Cement, Type i/ii) from 1 - 26 ft bgs Concrete (Sakrete), 0 - 1 ft bgs Road box (flush-mount) casing extends to 1 ft bgs			
_	Notes:	tion C	-kama Piremati-	· ar	20c = 2l	pove ground surface			
		•	stem - Burmis		-	elow ground surface			
		ents fro vater tal	om top of PVC	riser	ń82 ± Di	SION RECORDS 20119CG			

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Westo	n Solutio	ns, Ind	.		SOIL BO	RING/WELL CO	MPLETION LOG	P	age 1 of 2
Project		•		Park Stre	et Site	Boring ID	NA	Groundwa	ter Levels*
Locatio	n			Benning	ton, Vermont	Well ID	EPA-102	Date	Depth (ft)
Date D	rilled			8/20/20:	12 thru 8/21/12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	6.79
Drilling	Company			New Har	npshire Boring	Sampling Method	2-in diam. Split Spoon		
Drilling	Foreman			Manlea \	W. Thompson	Completion Depth	34.6 feet bgs		
Drill Ri	д Туре			CME-550		Surface Elevation			
Logged	by			George I	Mavris - Weston,	Superfund Technical	Assessment and Response T	eam (START)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription		ative Density Descriptor
24		NA	NA	NA	drive and wash drilling DEX casing was remwash drilling method soil sampling. Water table at 4.35 if the decided of the decid	ng method was used once noved and 4-inch regular d. Used 2-inch diameter s feet bgs.		frive and ner for	NA
22		1	WOR (2 ft)	17	0 - 11" Slough (Lig	ght brown, SILT, some clar vn, SILT, some very fine sa	y. Wet).		Very Soft
_ 24		2	4-9-9-11	19	5 - 19" Light brow	ght brown, SILT, some ver on, SILT and CLAY. Wet.	y fine sand. Wet). and wash drilling method.		Very Stiff

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Westo	n Solutio	ns, Ind	c.		SOIL BO	RING/WELL CO	OMPLETION LOG		Page 2 of 2	
Project				Park Str	eet Site	Boring ID	NA	Groundw	ater Levels*	
Locatio	n			Benning	ton, Vermont	Well ID	EPA-102	Date	Depth (ft)	
Date D	rilled			8/20/20	12 thru 8/21/12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	6.79	
Drilling	Company			New Ha	mpshire Boring	Sampling Method	2-in diam. Split Spoon			
Drilling	Foreman			Manlea	W. Thompson	Completion Depth	34.6 feet bgs			
Drill Ri	g Type			CME-55	OX	Surface Elevation				
Logged	l by			George	orge Mavris - Weston, Superfund Technical Assessment and Response Team (START					
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	R	elative Density Descriptor	
26		3	8-5-5-6	17	0 - 17" Light brown	a, SILT, some clay. Wet.			Stiff	
28	1				Advanced borehole	to 30 feet bgs using drive	and wash drilling method.			
30		· 4	8-4-6-7	16	0 - 16 " Light brown	ı, SILT, little clay. Wet.			Stiff	
34		•			Advanced borehole t	to 35 feet bgs using drive	and wash drilling method.			
36		5	5-7-9-10	18	0 - 18 " Light brown	ı, very fine SAND and SILT	, little clay. Wet.	٨	Nedium Dense	
38				_		-End of borin	g at 37 feet-			
v	/ell Constru	ıction [Details:							
		Scree Riser Filter			2-in dian		0 in) Schedule 40 PVC screen, 2 Criser, 2.4 ft ags - 29.6 ft bgs bgs	29.6 - 34.6 ft	bgs	
		Bento Grout Conci			Grout (Pe Concrete	Bentonite seal from 26 - 27.5 ft bgs (2 Inches of sand on top of bentonite) Grout (Portland Cement, Type I/II) from 1 - 26 ft bgs Concrete (Sakrete), 0 - 1 ft bgs Metal protective casing extends 2.6 ft ags and 2.4 ft bgs				
		ments fi	ystem - Burmi rom top of PV ble		bgs = bel	ove ground surface low ground surface It Applicable	WOR = Weight of rods			

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Westo	on Solution	ons, In	<u>.</u>		SOIL BO	RING/WELL CO	OMPLETION LOG	P	age 1 of 2
Project	<u> </u>			Park Stre	eet Site	Boring ID	NA .	Groundwa	ter Levels*
Locatio			 -	Benning	ton, Vermont	Well ID	EPA-103	Date	Depth (ft)
Date D	rilled	-		17-Aug-:	12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	9.04
Drilling	Company	<u> </u>		New Har	mpshire Boring	Sampling Method	2-in diam. Split Spoon		
_	Foreman			+	W. Thompson	Completion Depth	35.2 feet bgs		
-	g Type			CME-550	ox	Surface Elevation			
Logged				George I	Mavris - Weston,	Superfund Technical	Assessment and Response T	eam (STAR	r)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	Re	lative Density Descriptor
24		NA NA	NA	NA ,	then drive and wash ODEX casing was rer wash drilling method soil sampling. Water table at 6.40 if 0 - 14.5 feet Grave and metamorphic re	drilling method was used moved and 4-inch regular d. Used 2-inch diameter s feet bgs.		i. drive and ner for	NA
_ 16		1	WOR-4-8-10	16	0 - 16" Brown, SI	LT, little very fine sand, tr	ace clay. Wet.		Stiff
18		2	8-12-13-14	24	6 - 12" Brown, SI 12 - 14" Gray and		race clay. Wet. ne sand, trace clay. Wet. trace clay, mottled (brown and gra	y). Wet.	Very Stiff
20					Advance borehole to	o 20 feet bgs using drive a	and wash drilling method.		
22_		3	6-8-9-13	21	0 - 21" Brown, ve	ery fine SAND, some silt, t	race clay. Wet.	N	ledium Dense
24					Advance borehole to	o 25 feet bgs using drive a	and wash drilling method.		

West	on Solutio	ons, In	ic.		SOIL BO	ORING/WELL CO	OMPLETION LOG		Page 2	of 2
Projec	t			Park Stre	eet Site	Boring ID	NA	Ground	water Le	vels*
Locatio	on			Benning	ton, Vermont	Well ID	EPA-103	Date	Dept	th (ft)
Date D	rilled			17-Aug-:	12	Drilling Method	ODEX and Drive and Wash	28-Aug-	12 9.	.04
Drilling	g Company	·		New Hai	mpshire Boring	Sampling Method	2-in diam. Split Spoon			
Drilling	g Foreman			Manlea	W. Thompson	Completion Depth	35.2 feet bgs	<u> </u>		
	g Type			CME-550		Surface Elevation				
Logged	l by			George I	Mavris - Weston	, Superfund Technical	Assessment and Response T	eam (ST/	ART)	
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	:	Relative D	•
26		4	7-21-34-27	24	0 - 24" Grayish-bı	rown, SILT, little clay. Wet.			Hard	
28 - 30	September 200 Se				Advanced borehole	e to 30 feet bgs using drive	and wash drilling method.			
32		5	27-30-31-23	24	1	very fine SAND, some silt, t own, very fine SAND, some	-	·	Very De	≥nse
 34	**************************************				-			• :		
36		6	7-10-11-15	18	0-18" Light br	own, very fine SAND, some -End of borin	•		Medium [Dense
38										
	/ell Constru	Scree Riser Filter	sand onite seal		2-in dia Filter sa Benton Grout (Concre	meter, Schedule 40 PVC and (0) from 28 - 37 ft be ite seal from 26.5 - 28 ft Portland Cement, Type I te (Sakrete), 0 - 1 ft bgs	bgs (2 inches of sand on top o		_	
		ments f	System - Burm from top of P\ able		bgs = b	bove ground surface elow ground surface lot Applicable	WOR = Weight of rods			

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Westor	Solution	ns, In	C.		SOIL BO	RING/WELL CO	OMPLETION LOG		Page 1 of 1
Project				Park Stre	eet Site	Boring iD	NA	Groundy	rater Levels*
Location	1			Benning	ton, Vermont	Well ID	EPA-104S	Date	Depth (ft)
Date Dri	illed			22-Aug-	12	Drilling Method	ODEX	28-Aug-1	.2 4.62
Drilling (Company	,		New Hai	mpshire Boring	Sampling Method	NA		
Drilling I	Foreman			Manlea	W. Thompson	Completion Depth	10.5 feet bgs		<u> </u>
Drill Rig				CME-550		Surface Elevation			
Logged I	by			George I	Mavris - Weston,	Superfund Technical	Assessment and Response	Team (STA	RT)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	,	Relative Density Descriptor
6810		NA :	NA	· NA	_	-	A	lo soil	NA
We	ell Constru	Scree Riser Filter	sand onite seal		2-in diar Filter sa Bentonii Concrete	meter, Schedule 40 PV0 nd (0) from 1 - 11.5 ft b te seal from 0.75 - 1 ft e (Sakrete), 0 - 0.75 ft b	bgs (1 inch of sand on top of b		t bgs
<u>.</u> <u>Z</u>	_	water t		/C riser		ove ground surface low ground surface			

Weston Solutions, Inc.		SOIL BO	RING/WELL CO	OMPLETION LOG	Р	age 1 of 2		
Project	Park Str	eet Site	Boring ID	NA	Groundwa	ter Levels*		
Location	Benning	ton, Vermont	Well ID	EPA-104D	Date	Depth (ft)		
Date Drilled	21-Aug-	12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	4.49		
Drilling Company	New Ha	mpshire Boring	Sampling Method	2-in diam. Split Spoon				
Drilling Foreman	Manlea	W. Thompson	Completion Depth	20 feet bgs				
Drill Rig Type	CME-55	0X	Surface Elevation					
Logged by	George	George Mavris - Weston, Superfund Technical Assessment and Response Team (STA						
Depth (ft bgs) Well Split Spoon (N)	Recovery (inches)		Soil Des	cription	Re	lative Density Descriptor		
2_	NA	drive and wash drilling ODEX casing was ren wash drilling method soil sampling. O - 18 feet Gravel, metamorphic rock from	feet through cobble/bouting method was used once noved and 4-inch regular d. Used 2-inch diameter s		rive and ener for	NA		
201 1 14-16-20-20	9	_	and gray, very fine SAND little coarse gravel. Wet.			Hard		
THE RESTREET	20	0 - 17" Gray, CLAY. 17 - 20" Light brown	. Wet. n, SILT and very fine SANO	D. Wet.		Hard		

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Weston Solution	ns, Inc.	SOIL BO	ORING/WELL CO	OMPLETION LOG	P	age 2 of 2			
Project		Park Street Site	Boring ID	NA	Groundwa	ter Levels*			
Location		Bennington, Vermont	Well ID	EPA-104D	Date	Depth (ft			
Date Drilled	-	21-Aug-12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	4.49			
Drilling Company		New Hampshire Boring	Sampling Method	New Hampshire Boring Sampling Method 2-in diam	2-in diam. Split Spoon				
Drilling Foreman		Manlea W. Thompson	Completion Depth	20 feet bgs					
Drill Rig Type		CME-550X	Surface Elevation						
Logged by		George Mavris - Weston	, Superfund Technical	Assessment and Response T	eam (START	')			
· · · · · · · · · · · · · · · · · · ·	Riser Filter sand Bentonite seal Grout	Filter si Benton 20.5 - 2	and (0) from 13 - 20.5 ft	gs (2 inches of sand on top of be	entonite) and	from			
***************************************	Concrete	· ·	te (Sakrete), 0 - 1 ft bgs	• /					
		. Metal p	protective casing extend	is 2.7 ft ags and 2.3 ft bgs	•				
Notes:		•			•				
Soil Classific	ation System - Burr	nister ags = a	bove ground surface						
* Measurer	nents from top of P	VC riser bgs = b	bgs = below ground surface						
V Top of w	ater table	NA = N	lot Applicable		•				

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West	on Solutio	ons, In	c.		SOIL BO	RING/WELL CO	MPLETION LOG	Р	age 1 of 2
Project				Park Stre	eet Site	Boring ID	Boring ID NA		ter Levels*
Locatio						Well ID	EPA-105	Date	Depth (ft)
Date D	rilled			8/14/20	12 thru 8/17/12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	8.30
Drilling	Company	,		New Hai	mpshire Boring	Sampling Method	2-in diam. Split Spoon		
	Foreman			Manlea	W. Thompson	Completion Depth	39.2 feet bgs		
Drill Ri				CME-556	-	Surface Elevation			
Logged				George	Mavris - Weston,	Superfund Technical	Assessment and Response T	eam (START)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription		ative Density Descriptor
2	$\overline{\nabla}$	NA	NA	NA	drive and wash drilling DEX casing was ren wash drilling method soil sampling. Water table at 5.60 f	ng method was used once noved and 4-inch regular d. Used 2-inch diameter s feet bgs.		and then drive and ner for	NA
20		1	WOR (1.5 ft)-3 (0.5 ft)	22		and very fine SAND, little SAND, trace silt and clay.	The state of the s	,	ery Loose
22		2	6-8-8-12	20		light gray, SILT and very f T, little clay. Wet.	ine SAND, trace clay, wet.		Very Stiff
24		3	18-14-19-20	22	9 - 16" Brown, fine	own, fine-to-very fine SAN SAND and SILT. Wet. In and gray, fine SAND. W			Dense
26 <u> </u>					Advanced borehole t	to 30 feet using drive and	wash drilling method.		

G \Park Street\Boring Logs_Final\EPA-105_Final

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Westo	n Solutio	ns, In	c.		SOIL BO	RING/WELL CO	MPLETION LOG	P	age 2 of 2
Project				Park Stre	et Site	Boring ID	NA	Groundwa	ter Leveis*
Locatio	n			Benning	ton, Vermont	Well ID	EPA-105	Date	Depth (ft)
Date D	rilled			8/14/20:	12 thru 8/17/12	Drilling Method	ODEX and Drive and Wash	28-Aug-12	8.30
Drilling	Company				·	Sampling Method	2-in diam. Split Spoon		
	Foreman			_	W. Thompson	Completion Depth	39.2 feet bgs		
Drill Ri				CME-550	•	Surface Elevation			
Logged							Assessment and Response T	eam (START)
Depth (ft bgs)	Well Construct	Split Spoon No.	Blow Counts (N)	Recovery	1	Soil Des		Re	lative Density Descriptor
28		5	7-8-11-14 5-7-9-11	12	Advanced borehole of the state	· · · · · · · · · · · · · · · · · · ·		one?). M	Very Stiff edium Dense
40		6	9-13-16-21	16	0 - 16" Light brown	, SILT, trace clay. Wet. -End of borin	g at 42 feet-		Very Stiff
w	/ell Constru	uction	Details:						
			sand onite seal t		2-in diameter, No. 10 slot (0.010 in) Schedule 40 PVC screen, 34.2 - 39.2 ft bgs 2-in diameter, Schedule 40 PVC riser, 2.8 ft ags - 34.2 ft bgs Filter sand (0) from 32 - 42 ft bgs Bentonite seal from 30.5 - 32 ft bgs (2 inches of sand on top of bentonite) Grout (Portland Cement, Type I/II) from 1 - 30.5 ft bgs Concrete (Sakrete), 0 - 1 ft bgs Metal protective casing extends 2.8 ft ags and 2.2 ft bgs				
		ments 1	System - Burm from top of PN able		bgs = be	ove ground surface low ground surface ot Applicable	WOR = Weight of rods		,

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Weston Soluti Project		•	Park Stre	et Site	Boring ID	NA	Groundy	vater Levels'
Location				ton, Vermont	Well ID	EPA-106S	Date	Depth (ft
Date Drilled			23-Aug-		Drilling Method	ODEX	28-Aug-1	
Drilling Compan	v	-,		mpshire Boring	Sampling Method	NA		
Drilling Foremar				W. Thompson	Completion Depth	11.7 feet bgs		
Drill Rig Type			CME-550		Surface Elevation	J		<u> </u>
Logged by			George I	Mavris - Weston,	Superfund Technical	Assessment and Respo	nse Team (STA	RT)
Depth Well (ft bgs) Construct.	Split Spoon	Blow Counts (N)	Recovery		Soil Des	cription		Relative Densit Descriptor
2 2 4 4 6 8 8 10 12	NA	· NA	NA		d. See EPA-106D for soil de		od. No soil	NA
Well Const	ruction			2-in dia	meter, No. 10 slot (0.01	.0 in) Schedule 40 PVC scr	een, 1.7 - 11.7 f	t bgs
Ti.	Riser			2-in dia		riser, 2.6 ft ags - 1.7 ft bg		
Bentonite seal Concrete				Bentoni Concret Metal p	of bentonite)			
	water ta		/C riser	_	pove ground surface Plow ground surface			

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Westo	n Solutio	ns, Ind	-		SOIL BO	RING/WELL CO	MPLETION LOG	P	age 1 of 2
Project				Park Stre	et Site	Boring ID	NA	Groundwa	ter Levels*
Locatio				Benningt	on, Vermont	Well ID	EPA-106D	Date	Depth (ft)
Date D	rilled			23-Aug-1	2	Drilling Method	ODEX and Drive and Wash	30-Aug-12	2.21
Drilling	Company			New Har	npshire Boring	Sampling Method	2-in diam. Split Spoon		
Drilling	Foreman			Manlea \	V. Thompson	Completion Depth	28.3 feet bgs ·		
Drill Ri	д Туре			CME-550		Surface Elevation			
Logged	by			George N	/lavris - Weston,	Superfund Technical	Assessment and Response T	eam (START)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription		ative Density Descriptor
- 2 4 6 10 14 16 20 22 22 14 16 18 1		NO.	NA	NA	drive and wash drilling DEX casing was rer wash drilling method soil sampling. Water table at 2.21 O - 23 feet Gravel, metamorphic rock for the sampling of	ng method was used once moved and 4-inch regular d. Used 2-inch diameter s feet bgs.		Irive and ner for	NA
24		1	WOR-WOH-1-	10		wn, very fine SAND and SI			Very Loose

	on Solutio	ons, In	С.		SOIL BO	DRING/WELL C	OMPLETION LOG		Page 2 of 2
Projec				Park Str		Boring ID	NA	Ground	water Levels
Locati	on			Benning	ton, Vermont	Well ID	EPA-106D	Date	Depth (ft
Date D	Prilled			23-Aug-	12	Drilling Method	ODEX and Drive and Wash	30-Aug-:	12 2.21
Drillin	g Company			New Ha	mpshire Boring	Sampling Method	2-in diam. Split Spoon		
Drillin	g Foreman		•	Manlea	W. Thompson	Completion Depti	n 28.3 feet bgs		
	ig Type			CME-55	OX.	Surface Elevation			<u> </u>
Logge	i by			George	Mavris - Weston,	Superfund Technica	al Assessment and Response	Team (STA	RT)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil De	scription		Relative Density Descriptor
26		2	7-17-16-20	20					
28					Advanced borehole	to 30 feet bgs using driv	re and wash drilling method.		
30						-End of borir	ng at 28.3 feet-		
- 32		3	3-8-10-9	16	0 - 16" Light brown	n, CLAY, little silt, trace c	coarse gravel (in clay, angular). Wet	.	Very Stiff
34		4	4-7-6-7	17	0 - 3" Light brow 3 - 17" Light brow	n, CLAY, little silt, trace on, SILT and very fine SAM	coarse gravel (in clay, angular). Wet	i.	Ştiff
W	/ell Constru	c tion C Screer			2-ìn dian	neter, No. 10 slot (0.0	10 in) Schedule 40 PVC screen,	23.3 - 28.3 f	t høs
	11 (1) 1 (1) 2 (1)	Riser Filter :			2-in dian		C riser, 2.3 ft ags - 23.3 ft bgs		. 563
		Bento	nite seal			e seal from 18 - 21 ft 3 - 34 ft bgs.	bgs (2 inches of sand on top of t	pentonite) a	ind
Grout Concrete						ortland Cement, Type (Sakrete), 0 - 1 ft bgs	I/II) from 1 - 18 ft bgs		
					Metal pr	otective casing extend	ds 2.3 ft ags and 2.7 ft bgs		
	Notes:								
		ation Sv	stem - Burmis	ter	ags = aho	ove ground surface	WOD - Waight of rada		
Soil Classification System - Burmister * Measurements from top of PVC riser √ Top of water table						ow ground surface	WOR = Weight of rods WOH = Weight of hammer		

Westo	on Solution	s, Inc.			SOIL BO	RING/WELL CO	MPLETION LOG	Pa	age 1 of 2
Project				Park Stre	eet Site	Boring ID	NA	Groundwa	ter Levels*
Locatio	on			Benning	ton, Vermont	Well ID	EPA-107	Date	Depth (ft)
Date D	rilled			29-Aug-1	12	Drilling Method	ODEX and Drive and Wash	30-Aug-12	3.03
Drilling	g Company			New Har	mpshire Boring	Sampling Method	2-in diam. Split Spoon		
Drilling	g Foreman_			Manlea \	W. Thompson	Completion Depth	22.2 feet bgs		
	g Type			CME-550		Surface Elevation			
Logged	l by			George	Mavris - Weston, S	Superfund Technical	Assessment and Response T	eam (START	<u>}</u>
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	I	ative Density Descriptor
					0 - 6" - Topsoil				
2_						- ·	ders using ODEX drilling method, a e below the cobbles/boulders.	and then	
-	∇				1 -	=	casing was advanced while using openits spoons and 140 lb. auto-hamn		
4_					Water table at 3.28	feet bgs.			
6_									ŀ
<u>-</u> ,						cobbles, and boulders (wagments), and fine-to-coa	hite, pink, tan, buff, and black qua arse sand, and silt.	rtzite and	į
8									
_ 10						•	•	}	
,	A. I	NA	NA	N/A					NA
12	1000 11000 1000 1000 1000 1000								
_									
14							•		
16									
-									
18									
20					Split spoon soil samp	oling began at the 20 - 22	foot interval.		
_ 22		1	6-11-24-28	9	_		GRAVEL (subangular, fines are past etamorphic rock fragments), trace o		Hard
_ 24	202 204 14 16 18 18 18 18 18 18 18	2	14-18-22-32	12			GRAVEL (subangular, fines are pass etamorphic rock fragments), trace o		Hard
					Advanced borehole	to 25 feet using drive and	wash drilling method.		

West	on Solution	ns, Inc	:.		SOIL BO	RING/WELL CO	OMPLETION LOG		Page 2 of 2	
Projec	t			Park Stre	et Site	Boring ID	NA	Groundwater		
Locatio	on			Benning	ton, Vermont	Well ID	EPA-107	Date	Depth (ft	
Date C	rilled		<u> </u>	29-Aug-12		Drilling Method	ODEX and Drive and Wash	28-Aug-1	12 3.03	
Drillin	g Company			New Har	npshire Boring	Sampling Method	2-in diam. Split Spoon			
Drillin	Drilling Foreman			Manlea '	W. Thompson	Completion Depth	22.2 feet bgs			
Drill Ri	Drill Rig Type			CME-550)X	Surface Elevation				
Logged	d by			George I	Mavris - Weston,	Superfund Technical	Assessment and Response T	Team (STA	RT)	
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Description			Relative Density Descriptor	
26		3	17-24-35-44	20	1 "	20" Light brown and gray, SILT, some coarse-to-fine gravel (subangular), little clay very hard, appears dry when broken). Fines plastered on gravel fragments. Wet.				
28		4	41-52-100R (4 inch advance)	21	(very hard, appears	• • • • • • • • • • • • • • • • • • • •	arse-to-fine gravel (subangular), lit plastered on gravel fragments. Ro ed at 28.5 ft bgs.		Hard	
30						-End of boring	g at 28.5 feet-			
,	Well Constru	iction [Details:		•					
		Scree	en		2-in diar	neter, No. 10 slot (0.01	LO in) Schedule 40 PVC screen, :	12.2 - 22.2	ft bgs	
		Riser			2-in diar	diameter, Schedule 40 PVC riser, 0.30 ft - 12.2 ft bgs				
	47.A	Filter	sand	Filter sand (0) from 10 - 22.5 ft bgs and 25 - 29 ft bgs						
		Bento	onite seal	Bentonite seal from 3 - 10 ft bgs (2 inches of sand on top of bentonite) and						
		•			from 22	.5 - 25 ft bgs				
		Grou	t		Grout (Portland Cement, Type I/II) from 1 - 3 ft bgs					
		Conc	rete			e (Sakrete), 0 - 1 ft bgs				
		2								

Road box (flush-mount) casing extends to 1 ft bgs

R = refusal

ags = above ground surface

bgs = below ground surface

NA = Not Applicable

Notes:

Soil Classification System - Burmister

 ∇ Top of water table

* Measurements from top of PVC riser

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<u>Westo</u>	n Solutio	ns, In	С.		SOIL BU	KING/WELL CO	MPLETION LO	<u> </u>	Page 1 of 1
Project				Park Stre	eet Site	Boring ID	NA	Groundw	ater Levels'
Locatio	n			Benning	ton, Vermont	Weil ID	EPA-108S	Date	Depth (ft
Date Di	rilled			27-Aug-1	12	Drilling Method	ODEX	30-Aug-1	2 6.29
Drilling	Company			New Har	mpshire Boring	Sampling Method	NA		
Drilling	Foreman			Manlea '	W. Thompson	Completion Depth	12.5 feet bgs		
Drill Ri				CME-550		Surface Elevation			
ogged	by			George I	Mavris - Weston,	Superfund Technical	Assessment and Resp	onse Team (STA	RT)
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Des	cription	F	lelative Densit Descriptor
2 4 6 8 10 12		NA	NA	NA	sampling conducted Water table at 3.41	d. See EPA-108D for soil differ feet bgs. -End of borin			NA
w	ell Constru	Scree Riser Filter	n sand onite seal		2-in dia: Filter sa Bentoni	meter, Schedule 40 PVC and (0) from 1.5 - 13 ft b	bgs (1 inch of sand on to	ogs	bgs
	Notes:	I			Metal p	rotective casing extend			
			rom top of P\	/C riser	ags = ab	ove ground surface			
	√ Top of ι	water ta	sble		bgs = be	elow ground surface			

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vvesto	n Solutio		<u></u>				MPLETION LOG	Groundwa	tor Lougle*
Project				Park Stre			NA	Date	Depth (ft)
Locatio	n				on, Vermont	Well ID	EPA-108D		6.39
Date D	rilled				L2 thru 8/27/12	Drilling Method	ODEX and Drive and Wash	30-Aug-12	6.39
Drilling	Company				npshire Boring	Sampling Method	2-in diam. Split Spoon	 	
Drilling	Foreman				W. Thompson	<u> </u>	32.2 feet bgs	 	-
Drill Ri	д Туре			CME-550)X	Surface Elevation	Assessment and Bosnopse T	oam (STAR)	<u> </u>
Logged				George	Mavris - Weston,	Superfund Technical	Assessment and Response T	eam (STAIN)	,
Depth (ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)	<u> </u>	Soil Des	cription 		lative Density Descriptor
10		No.	NA	NA	drive and wash drill ODEX casing was re wash drilling metho soil sampling. Water table at 3.39	ing method was used oncomoved and 4-inch regular and Used 2-inch diameter after begs.	Iders using ODEX drilling method, a below the cobbles/boulders. casing was advanced while using a split spoons and 140 lb. auto-hams white, pink, tan, buff, and black quarse sand, and silt.	and then drive and mer for	NA

G:\Park Street\Boring Logs_Final\EPA-108D_Final

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Project	,			Park Stre	et Site	Boring ID	NA	Groundwa	ter Levels	
ocatio						Well ID	EPA-108D	Date	Depth (f	
ate D	rilled					Drilling Method	ODEX and Drive and Wash	30-Aug-12	-	
	Company				<u>-</u>	Sampling Method	2-in diam. Split Spoon		1	
	Foreman				W. Thompson	Completion Depth	32.2 feet bgs		1	
	g Type			CME-550		Surface Elevation				
oggeo							Assessment and Response T	eam (STAR)	<u>, </u>	
Depth ft bgs)	Well Construct.	Split Spoon No.	Blow Counts (N)	Recovery (inches)		Soil Description				
26 - 28 - 30					Split spoon soil samp	oling began at the 30 - 32	foot interval.			
- 32		1	WOR (12 IN)-5 9	14	0 - 3" Slough. Wo 3 - 14" Brown, SIL			P	/ledium Stil	
- 34 <u>_</u>		2	9-13-14-13 ,	20	0 - 4" Slough. Wo 4 - 20" Brown, CLA		g at 34 feet-		Very Stiff	
- 36										
V	Vell Constru	Scree Riser				•	0 in) Schedule 40 PVC screen, 2 riser, 3.0 ft ags - 27.2 ft bgs	27.2 - 32.2 ft	bgs	
	- (151)	Filter	sand				bgs and from 1 - 5 ft bgs			
	4						-			
Bentonite seal Concrete						Bentonite seal from 5 - 25 ft bgs and 32.2 - 34 ft bgs. Concrete (Sakrete), 0 - 1 ft bgs				
	L	J Come.					s 3.2 ft ags and 1.8 ft bgs			
					wetar pr	Tractife cooling exterior				
	Notes:									
			ystem - Burmi		•	ove ground surface	WOR = Weight of rods			
			rom top of PV	C riser	bgs = be	low ground surface				
	V Top of •	water ta	ble		NA = No	ot Applicable				